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MEMOIR,

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ON THE

...resent state, productive resources, and capabilities for commerce, of Siberia, Manchuria, and the Asiatic islands of the Northern Pacific ocean; ...d on the importance of opening commercial intercourse with those ...untries, &c.

Addressed to His Excellency James K. Polk, President of the United States,

BY AARON H. PALMER,

Counsellor of the Supreme Court of the United States, Corresponding Member of the National Institute, Washington, &c.

MARCH 8, 1848.

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NEW YORK, *January* 10, 1848.

SIR: I have the honor of transmitting you, herewith, a brief memoir on the present state, productive resources, and capabilities for commerce, of several of the comparatively unknown countries of the East, which are daily becoming of importance to us in a political as well as commercial point of view, and where a new world may be opened to the trading enterprise of our countrymen.

The territories of Oregon and California, now in rapid progress of settlement by enterprising citizens of the United States, together with the great and increasing value of American navigation employed in commerce and the whale fishery in the northern Pacific, are eminently entitled to the fostering care of our government, and require the early adoption of a comprehensive system of policy, both for their protection and development, and to secure the permanency of our commercial and maritime supremacy on that ocean. Early measures should be taken for the reconnoissance and survey of the most feasible route for a ship canal to unite the Atlantic and Pacific, and also for a railroad from a point on the Mississippi to San Francisco or San Diego, in California, to accelerate intercommunication between the different sections of our magnificent and mighty republic on both oceans.

It is estimated that the American whaling vessels alone in the Pacific exceed in number 600, and give employment to upwards of 20,000 men; and that during the year ending the 31st December, 1847, the whole number of our merchant vessels which cleared for ports in the Pacific and to ports in the East Indies, amounted to 181.

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I would also take leave to suggest the importance of an early revision of our commercial convention with Russia of the $\frac{5}{17}$th April, 1824, for the admission of our flag into the ports of Siberia, Kamtschatka, the Kurile and Aleutian islands, in the northern Pacific ocean, as well as those of the Russian colonies on the northwestern coast of America; by which a new and profitable commerce may be opened, mutually beneficial to both nations.

I consider it equally important that our government should insist on the right of navigating the great Manchurian river Amur and its affluents, and of trading with the colonial dependencies of China, upon the same footing as the Russians; and that we claim the further privilege of commercial intercourse at Tinghae, in the Chusan Archipelago. The favorable position of that port, with its safe anchorages, accessible to the largest ships at all seasons, lying near the embouchure of the great Yangtsekang river, and within two days sail of Japan and Corea, give it superior advantages over every other port in China for trade, and as a depot and halting station for the American trans-Pacific line of steamers, which it is contemplated to establish between Panama and China, in connexion with the line now in progress from Panama to Oregon.

The memoir is extracted from my forthcoming work, entitled "The Unknown Countries of the East," and is arranged under the following heads, viz:

1. *Siberia, its valuable products and rich gold mines.*
2. *Russian overland trade with China at Kiakta, &c.*
3. *Manchuria and the river Amur, &c.*
4. *Island of Tarakay, or Saghalien.*
5. *Russian and Japanese Kurile islands, &c.*
6. *Steam communication with China: superior commercial advantages of Chusan, &c.*
7. *Special mission to the East: steam navigation on the Indus and Brahmaputra, &c. Extensive caravan trade with Northwestern and Central Asia, &c.*
8. *Policy of encouraging immigration of Chinese agricultural laborers to California: railroad from the Mississippi to the bay of San Francisco.*
9. *Ship canal from the Atlantic to the Pacific;* to which are appended an outline chart of the coast of Northern Asia and the adjacent islands in the Northern Pacific and a map of the isthmus of Nicaragua; together with a prospectus of the new work above mentioned, for which your patronage and the aid of Congress is most respectfully solicited, to enable me to complete it under the auspices of our government according to the plan therein indicated.

I have the honor to be, with the highest respect, sir, your Excellency's most obedient servant,

AARON H. PALMER.

His Excellency JAMES K. POLK,
President of the U. S., Washington.

1. Siberia, its valuable products and rich gold mines.

Siberia is the Asiatic section of the Russian empire, and is bounded north by the Arctic ocean; east by Behring's strait, Kamtschatka, and the sea of Okotsk; south by Manchuria, Mongolia, and independent Tartary; and on the west by the Ural mountains, which separate it from European Russia. Its greatest length, from east to west, exceeds 3,600 miles; and its greatest breadth, from north to south, nearly 2,000 miles. Population about 3,500,000.

The country has been supposed to derive its name from *Sibir*, an ancient Tartar fortress upon the banks of the Irtysch, near Tobolsk; by others from *Sibiri*, which, in several eastern languages, signifies "sunrise," "daylight." Western Siberia was first conquered from the Tartars and other native tribes by Yama Timoséef, a Cossack adventurer, at the head of a band of Don Cossacks, in 1578, and the whole country, including Kamtschatka, was subsequently subjugated by Russian fur traders and pedlars to the dominion of the Czar; the fur trade having been for ten centuries the pervading thread of Russian diplomacy, as well as of Russian commerce, conducted by merchant traders and pedlars from the Baltic to the northwest coast of America, and from the Altaï* mountains to the Frozen ocean.

Siberia, or Asiatic Russia, may be considered as a vassal State of the Russian empire, and is divided into two separate governments, each possessing civil and military attributions, under two general military chieftainships of Eastern and Western Siberia. The former embraces Irkoutsk, Yakoutsk, Kiakta, Okotsk, and Kamtschatka; and the latter Omsk, Tobolsk, and Tomsk. The Russian possessions on the northwestern coast of America are not included in the government of Siberia, but are under the exclusive civil and military administration of the Imperial Russian American Company, subject to the superintendence of the imperial department of commerce, St. Petersburg.

This country possesses the climates as well as the products of both hemispheres; extremes of heat and cold, days without night, and months when the sun is not above the horizon. All the ordinary grain and vegetables of Europe are found even as far north as the banks of the Irtysch, beyond 55° north latitude, in western Siberia. Most of our domestic animals are common to this country, and at the northern as well as the southern extremities many of the wild ones of Europe and Asia. Fish of the greatest abundance, and many sorts unknown in Europe, teem in all the rivers, and form the principal food of the inhabitants. Among the wild animals are deer, elk, reindeer, Daurian antelopes, argeli, mountain goats, musk animals, lynxes, squirrels, wolves, gluttons, wild hogs, white and brown bears, red, gray, black, and polar foxes, ermines, sables, martens, hares, polecats, ounces, marmots, beavers, otters, seals, and morses, &c.

Among the mineral products of Siberia are gold, silver, platinum, iron, copper, lead, tin, quicksilver, antimony, cobalt, zinc, coal; and several kinds of precious stones occur, and diamonds have been found in the Uralian range. The amethysts, topazes, emeralds, and red tourmalines

*Altai-iin-oola, or "Montains of Gold," in Turkish and Mongolian.

are of great beauty; zircons of extraordinary size have been found near Miask, south of Ekaterinebourg. Several precious stones are brought from the Altaï mountains, the most valuable of which are jasper and porphyry, of great beauty, of which a quarry is worked nearly in the centre of the Altaï mountains, in the valley of the river Charysch. The valuable and beautiful mineral malachite, from the mines of Ekaterinebourg, sells on the spot, in the block, for about $5 per pound. It is extremely hard and difficult to work, and when polished, is a very expensive article. The mountains of Dauria contain beryls, topazes, emeralds, and some other stones of less value. In the Baïkal mountains, especially towards the western extremity of the great lake Baïkal, lapis lazuli of a very fine quality is found. There are extensive deposites of mica in various parts of Siberia, where it is generally used, and called Russian glass. A very hard and transparent species of silex, called tæjeloves, is found among the rolled flint in the torrents of Eastern Siberia; it takes a beautiful polish, and is cut like a diamond, which it resembles in brilliancy.

The Ural constitutes a long and narrow ridge, extending from the Icy sea on the north, to the parallel of Orenburg on the south, and separates Europe from Asia throughout 18° of latitude. The southern half, reaching to 61° north latitude, is alone colonized; the northern portion, covered with impenetrable forests and deep morasses, is thus left to its wild inhabitants, whether Ostiaks, Voguls, or Samoyedes, its eastern flank having never been explored beyond 65° north latitude. The southern Ural is composed of many separate longitudinal ridges, embracing the mountains of Yarma, Zaganai, and Iremel, the latter attaining an altitude of of about 5,100 feet above the sea. The whole of the south Ural is included in the government of Orenburg, and is to a great extent a pastoral Bashkir country. With small exceptions, near Ekaterinebourg and Miask, where gold mines have been explored in the rock, the gold and platinum of the Ural are found in ancient alluvia, consisting of sand, gravel, and shingle. Enormous quantities of the purest magnetic iron ore are, however, extracted from the solid rock in open quarries; and in some districts, notably in that extending from Nijny-Tagilsk to Bogoslofsk, copper veins abound. With one exception, all the gold mines are on the Asiatic or Siberian flank of the Ural, and on the same side are nearly all the rocks of eruptive or igneous origin, and all the great veins. The great mineral wealth of the chain occurs between 54° and 60° north latitude; the southern extremity, which is very picturesque, being comparatively few, whilst the extreme north, or arctic region, containing few good ores, is yet unreclaimed, and is indeed unfitted for the existence of a civilized race. The Ural, with its lateral ridges, has nowhere a less breadth than 30 miles, and varies in altitude from 1,600 to 2,500 feet; and its culminating point is 6,000 feet above the level of the sea. A mass of native gold deposited in the Museum of the Imperial School of Mines, St. Petersburg, weighing about 78 pounds, and said to be the largest in the world, was discovered in the auriferous sands of the Southern Ural, in 1843.

The Altaï extends between 50° and 52½° north latitude, from west to east, from the confluence of the Uba and Irtysch, to Mount Gurbi, and the south of lake Baïkal. The mountain system of the Altaï contains the sources of the Irtysch and the Yenesei. The names Sayan, Tangnu, and Malakha, are applied to easterly portions of it; beyond the Baïkal it abuts upon the mountain ranges of the western Khin-gan and Yablonoi-

Krebet, which extend from northeast to southwest. The Altaï range occupies a space of 4,400 leagues, 20 to a degree, or an area equal to that of England. Except at the eastern extremity, it is everywhere surrounded by low lands. The masses which rise above the line of perpetual snow are all between the parallels of 49½° and 51°. The order in which the ranges succeed each other from south to north in this alpine region of the Altaï, is as follows: 1. The Narym mountains, between the rivers Narym and the Bukhturma. 2. The Sailughem mountains, between the rivers Bukhturma, Tshuya, and Koksun. 3. The Koksun or Ubinsk range, between the Koksun and the Uba. 4. The Alps of Terektinsk, between the Tshaush and the sources of the Koksun and Uba 5. The range between the Tshuya, the Tshaush, and the Anni. Culminating summits of the Altaï are in the second of these ranges. M. Gebeler, who made three journeys to the upper Altaï, between 1833 and 1835, describes Mount Bialukha, or "White Mountain," as inaccessible, and running up into two pinnacles covered with snow. He estimated its height approximatively at 10,300 feet—rather higher than Etna, and rather lower than the highest summit of the Pyrenees. The Tar-Bagataï, the southern offset of the Altaï, extends into China, and attains the limits of perpetual snow.

The Kusnetz system of mountains has a direction of SSE. to NNW.: it comes in contact with the Altaï about 85° east of Paris, on its northern declivity. The Kusnetz mountains have a strong analogy, both in the mineralogical constitution and the direction of the chain, with the Ural. They extend over a line equal in length to that of the Alps or the Pyrenees; in breadth they appear to occupy nearly a degree of longitude between the parallels 52° and 56°; their elevation is not mentioned. They abound in deposites of gold, which, as in the Ural, is found much more abundantly on the eastern declivity. Advancing eastward along the northern declivity of the Altaï, a third auriferous region is found near the confluence of the Yenesei and the Abakan. "It may be observed," says Sir R. J. Murchison, "as indicative of the structure of northeastern Asia, that the Altaï chain, in the direction from east to west, bounds, over a vast extent, the low northern plains of Asia; and that the Ural and Kusnetz chain, parallel to the meridian, are formations of a different era. They resemble in many of their characteristic features the Bolor and Suleiman mountains, and the Ghauts of southern India. The Altaï, Kusnetz, and Ural ranges also resemble each other in the abundance of their metallic wealth."

Besides the auriferous deposites in the eastern slopes of the Ural mountains, it appears that eastern Siberia possesses similar tracts of country of vastly greater extent than those of the Ural chain. On the flanks of the Altaï mountains Professor Hoffman has discovered an auriferous tract of an area larger than France, and all the subjacent rocks, when pounded up and analyzed, yield a certain per centage of gold. Several of the most eminent European geologists have inferred from this, that no sort of limit can be put to the gold produce of Siberia. The southern ranges of the Altaï mountains, equally auriferous, extend into China, and the Chinese, who are expert miners, are beginning to form mining establishments in those mountain regions. They have also discovered several new quicksilver mines, and resumed the working of the old ones that had been abandoned in China proper. The Siberian mines are generally worked by serf or

convict labor, with the application of fire instead of the more expensive process of quicksilver.

Sir R. J. Murchison, "Geology of Russia," is confident that Chinese Turkestan will prove to be another gold region like Siberia. The Tar-Bagataï mountains are stated by Colonel Helmersen, the distinguished Russian geologist, to be highly productive in gold. Professor Erman, in his geological survey of Russia, reports that the same system of palæozoic, eruptive and metamorphic rocks, in which the precious metals abound in the Ural and Altaï, extend to the Aldan mountains, not far from the north eastern shores of the sea of Okotsk, and in which may likewise be found the same minerals. Gold has been found in the *tundra*, or frozen steppes, covered with moss, of Eastern Siberia.

According to Humboldt's "Fragmens Asiatiques," and "Asie Centrale," the auriferous soil extends over a large portion of the north of Asia. Gold has been found from the Ural to the western declivity of the Yablonoi-Krebet, and the mountain regions between the Léna and the two Angarás, a distance of 56° of longitude. Gold has also been found in the vicinity of Udskoi, on the river Ud, which falls into the sea of Okotsk, opposite the Shantar islands, near the Manchurian frontier. An auriferous belt traverses the Asiatic continent, between the parallels of 50° and 60°, for a distance that exceeds the maximum breadth of Africa. He also observes that a considerable portion of the precious metals in use among the Greeks and Romans, was probably derived from this portion of the Scythian wilds; but modern Europe has been acquainted with them as sources of mineral wealth for a century and a half only. It was in the last year of the seventeenth century that Peter the Great formed the first mining establishments under the direction of his able envoy, Demidoff, since which period a steady progress has been made in developing the resources of these mountains, and a large portion of the Siberian flank of the Ural may now be unhesitatingly considered one of the most civilized tracts of the empire, whether as regards the industry and intelligence of the natives, and the state of arts and manufactures.

It thus appears from the results of the various scientific explorations of Siberia, that the greater portion of those vast regions may be considered as a new and inexhaustible El Dorado of the precious metals. "Well, therefore," observes Sir R. J. Murchison, "may political economists beg for knowledge at the hand of the physical geographer and geologist, and learn from them the secret on which the public faith of empires may depend."

The discovery of new gold veins and the introduction of improvements in the practice of engineering and mining skill in the Siberian mines since 1830, has greatly increased the quantity of their product, yielding the Emperor of Russia such an amount of treasure as to place him, in point of wealth, second to none in the world. On the 31st March, 1847, the accumulated unproductive capital of gold bullion from the Siberian mines in the imperial treasury exceeded 114 millions of silver roubles.* By a monetary ukase of that date, the sum of 30 millions silver roubles was appropriated for investment in the purchase of public funds, Russian as well as foreign, and was principally invested in English and French securities, leaving the sum of 84 millions silver roubles, ($63,000,000,)

* Silver rouble = 75 cents United States currency.

in the Emperor's own coffers. At first it was generally thought that political motives actuated him, particularly as regarded the French loan; it appears, however, to have been simply a commercial transaction, arising from an excess of treasure, as well as to afford increased facilities in the export trade of his dominions—particularly of grain—and by investing a part of his surplus gold in fluctuating European securities, at a time when their value was much depreciated, eventually to realize a large profit. The aggregate product of the Siberian gold mines, in 1847, is estimated at $25,000,000.

The Russian government has almost abandoned the extraction of platinum, owing to the cost of reduction, and the repugnance of the people to receive it as a coin of high price. The platinum of the Ural is now chiefly worked by the Demidoff family.

The principal depot of all the gold found in the country east of the Ural, is at the town of *Barnoul*, containing about 12,000 inhabitants, situated on the river Oby, between Tobolsk and Irkoutsk, in western Siberia, whence it is transported three times in the year to the mint at St. Petersburg. The Russian government levies a duty of 20 per cent. on the product of all the gold mines and gold washings.

This increased supply of gold from the Siberian mines, simultaneously with the working of the productive quicksilver mines in China, where that metal has become an important article of export, must necessarily tend to diminish the relative value of gold, and require the re-adjustment of the standard of the precious metals among all nations. It would also be highly important, to facilitate the commercial intercourse and regulate the exchanges of all nations, that a general congress of nations be assembled to agree on a uniform scale of coins, weights, and measures for all nations, and reduce the whole to a simple and uniform system.

Furs in Siberia and Russia are examined by the fur traders with the same minute care as precious stones with lapidaries; and a skin which unites all the desired qualities sometimes rises to an enormous price. Black fox skins are worth 2,000 to 5,000 roubles each. The lightness of the hide, the color and gloss of the fur, the age of the animal, the season in which it has been killed, the length of the hair, the condition of the under wool, and various other points, are carefully considered. Some of the animals must be shot only with a blunt piece of wood, others caught in traps, and others struck in a particular part of the body.

The tusks and teeth of the fossil elephant or Siberian mammoth, found in the Laikhovian islands, in the Arctic ocean, and in the northeastern part of the great river Léna, constitute a considerable article of commerce, and many persons make the discovery of them the business of their lives.

The word mammoth is of Tungousan origin, and means "animal of the earth." The Tungouses, by whom these organic remains were first discovered, believe the animal to be still living in Siberia, and that it has been seen on the banks and at the mouths of several of the large rivers that fall into the Arctic ocean. Modern geologists, including Humboldt and Lyell, have maintained that the mammoth must have been a denizen of the lands, where not only his bones, but even his entire carcas, covered with a thick and woolly hide, has been found in northern Siberia. Professor Owen has shown, by a close examination of their teeth, that these great quadrupeds were specially organized to live on the

branches of such shrubs and trees as grow in high boreal latitudes. This opinion is corroborated by the fact that great quantities of the fossil bones of the mammoth have been discovered in the vicinity of the great northern forests of Siberia. Some tusks have been found, weighing 432 pounds.

In the south Ural, as in the north, the remains of mammoths, *Bos Urus* and *Rhinoceros tichorhinus*, are found in the line of the gold works. The Bashkirs attach a superstitious feeling of respect for these bones, and have been known to say to the Russian miners that first settled among them, "Take from us our gold, if you will; but, for God's sake, leave us the bones of our ancestors." The Samoyedes, as Count Keyserling learnt in his late tour to the Petchora, have a most singular belief respecting the mammoth, which would lead us to suppose that many entire forms of the animal may from time to time have been known to them, or their predecessors. The mammoth of their legend is a great subterranean monster, delighting in ice caverns, and to whom they attach a superstitious reverence, believing that the man who exposes the creature to day, thereby kills it, and brings misfortune on his family. This seems to explain why it is so difficult to obtain, through the natives, the disinterment of the entire animal.

In 1712, Kang-hi, emperor of China, sent an embassy to Ayouka, a Khan of the Kalmuck Tartars, living on the banks of the Wolga, which traversed Siberia on its route, and returned to Pekin in 1715. An interesting itinerary of the embassy was written by Toulichen, the Chinese embassador, in which he states that "in the coldest part of this northern country (Siberia) there is a species of animal which burrows in the earth, and dies as soon as it is exposed to the sun and air. It is of great size, and weighs 10,000 lbs.; its bones are very white and shining, like ivory. It is not naturally robust, and consequently neither dangerous nor formidable, and is commonly found on the banks of rivers. The Russians collect the bones, out of which they make cups, saucers, combs, and a variety of other articles. The flesh of the animal is considered very wholesome and strengthening, and is eaten as a remedy in fevers. The foreign name is *men-tou wa*."

John Bell, of Antermony, in his "Journey to Pekin," through Siberia, in 1721, observes in reference to the mammoth: "The vulgar really imagine *mammon* to be a creature living in marshes under ground, and entertain many strange notions concerning it. The Tartars tell many tales of its having been seen alive. I have been told by Tartars in the Baraba that they have seen this creature, called mammon, at the dawn of day, near lakes and rivers; but that on discovering them, the mammon immediately tumbled into the water, and never appears in the day time. They say it is almost the size of a large elephant, with a monstrous large head and horns, with which he makes his way in marshy places and under ground, where he conceals himself till night. I only mention these things as the reports of a superstitious and ignorant people."

Admiral Von Wrangel, in his "Expedition to the Polar sea in 1820–'23," found deposites of mammoth bones on the Lesser Anuy river, near its outlet in the Icy sea, and observes that "the teeth, tusks, and bones, which are called by the general name of mammoth bones, but which probably belong to several different species of animals, are not distributed equally over Siberia, but form immense local accumulations, which become both richer and more extensive the farther we advance to the north.

They are found in the greatest abundance in New Siberia and the Lachow islands; the whole soil of the latter appears to consist of them; many hundred poods* weight are collected from them every year, whereas on the continent they are much scarcer, and are hardly ever met with in the southern part of Siberia. The tusks on the island are also much more fresh and white than those of the continent. A sand bank on the western side was most productive of all; and the fur traders maintain that when the sea recedes after a long continuance of easterly winds, a fresh supply of mammoth bones is always found to have been washed upon this bank, proceeding apparently from some vast store in the bottom of the sea."

The Léna, Yenesei, and Oby rank among the largest rivers of the Asiatic continent; they have their sources in the mountains of Central Asia, abound in a great variety of fish, and serve as channels of intercommunication with all parts of the Russian empire; but, having their embouchures in the Polar seas, are unavailable for foreign commerce. The Ural having its sources in the eastern slopes of the mountains of the same name, after a course of 1,350 miles, falls into the Caspian, and is the only large river in Siberia that does not flow into the Polar sea.

The Anadyr is principally remarkable for being the only considerable river of the globe whose sources lie within the Polar circle between the 68° and 69° north latitude. It rises in a lake of that range of the Aldan mountains which traverses the northeastern extremity of Asia, and terminates at cape Tshukotskoi-Noss, at Behring strait. In its eastern course it passes through 13 degrees of longitude and falls into the bay of Anadyr, a large gulf of the sea of Kamtschatka, forming an estuary at its mouth: the whole course of this river is about 500 miles.

There are numerous fresh water lakes in Siberia; one of the largest and most remarkable is the Baïkal, or "Rich lake," so called by the Yakouts, who formerly inhabited its shores—from baï, "rich," and kal, "lake,"—and by the Russians "the Holy sea," situated between 51° and 56° north latitude, and 104° and 111° east longitude. It is nearly 400 miles long, and from 30 to 60 wide, with high and rocky banks; contains a number of inhabited islands, and receives the waters of the Upper Angará, Selengá, Bargoosin, and several considerable rivers and mountain streams, amounting in all to 177. The waters are said to be subject to certain interior agitations, which sometimes render the navigation dangerous, even when the wind is moderate. It is very deep—in some places unfathomable; abounds in sturgeon, salmon, (of which there are 14 varieties,) salmon-trout, a species of herring, and a fish consisting entirely of bones and oily matter, called by Pallas *callyonymos Baïcalensis*, with a variety of other fish, seals of a silver color, corals, sponges, &c., which are valuable articles of commerce with the Chinese. Agriculture and the fisheries constitute the principal branches of industry and commerce of the Russians and Burats inhabiting the vicinity of the lake. It is about 1,793 feet above the level of the sea; the principal outlet is the large river Lower Angará, flowing to the Yenesei and the Polar sea.

The Tungousan tribes, occupying the borders of the lake, subsist by fishing and hunting the wild beasts which inhabit the woods and mountains. Wolves, bears, foxes, lynxes, wild cats, and gluttons, are numerous in the woods and on the steppes, and otters abound in the rivers. Beavers are

* A Russian pood is equal to 36 lbs. 2 oz. avoirdupois.

only found in the upper part of the Angará, but the elk and the musk-goat nearly in every district bordering on the lake. The musk of the latter, however, does not emit so strong a scent as that obtained from these animals in Tibet. Deer and stags abound everywhere, but the reindeer is only met with in a wild state in the northern mountains, and even there it is not numerous. The common hare, the mountain hare, and the Daurian hare, are found in great numbers on the steppes. The sable, too, as well as the hermeline, abound in many districts. The squirrel exists in this region in incredible numbers. Sometimes they unite in companies, and travel through the woods and steppes, swimming over rivers, and traversing the summits of the mountains. The color of the skin is reddish in summer, and gray in winter. A larger species which inhabits the northern and eastern shore of the lake, assumes in winter a silver-gray color. The species whose skin sells higest, is of the color of the sable in summer, and black-gray in winter. An immense number of squirrel skins is sent from here to the other parts of Siberia and Russia, as well as to China, besides the consumption on the spot, which is very great.

The commerce which the Russians carry on with the Chinese is considerably facilitated by this lake, which is open from May till November, and navigated by numerous small vessels, large barges, and a steamer. The Russian goods, for which the town of Irkoutsk, on the banks of the Lower Angará, 40 miles from the lake, is the principal depot, are carried thence to Kiakta, in summer by water, and in winter by sledges on the ice, across the lake to the mouth of the Selengá. Then they ascend this river to Wershneï Udinsk, or even to Selenginsk, but rarely higher. Thence the goods are transported by land to Kiakta, a distance of about 16 miles. Without the facility which this lake affords to the carrying on of this continually increasing commerce, that mart would never have risen to any degree of importance.

The islands which exist in this lake are numerous along the eastern, and in some places along the western shores; but most are of small extent, and nothing but masses of rock, which seem to have been separated by some convulsion of nature from the mountains on the shore. The largest is the island of Olkhon, which extends about thirty-two miles from southwest to northeast, but nowhere exceeds ten miles in breadth. It is extremely rocky and mountainous, and on its southwestern shore the mountains rise to a considerable height, but do not preserve the snow in summer. In its neighborhood there are some rocks, on which seals are annually killed in great numbers. The mountains in many parts are covered with larch, pine, birch, poplars, and willows; other districts afford good pasture for the cattle of about 150 families of Burats, who are the only inhabitants of the island. The strait which separates it from the continent is only two miles wide, but very deep, a line of one hundred fathoms not reaching the bottom; and the fishermen assert that even a line of 200 fathoms would not reach it.

The other lakes of Siberia are rather chains of ponds, or stagnant collections of saline waters, in the marshy or submerged steppes which cover a great extent of its western territories. Only the lake of Tchany, in the steppe of Baraba, and of Kurg Algydum in that of Ischm, present considerable expanses. Baron Humboldt thinks it not improbable that they are remnants of some great interior sea, connected, at an ante-historical period, with the Aral and the Caspian.

Irkoutsk, in 52° 16′ 41″ north latitude, is the seat of government of eastern Siberia, and has a population of about 25,000, composed of Russians, Cossacks, Tungouses, Mongols, and Burats. It has an imperial factory of woollen cloths for the supply of the troops of Siberia; manufactures of linen and other piece goods, glass, hats, soap, leather, &c., and is the residence of the numerous artisans in the different trades common in Europe. It is the great entrepot for the commerce of northeastern Asia, importing tea, rhubarb, fruit, paper, silks, porcelain, and other manufactured goods from China, by the way of Kiakta; and furs, peltries, &c., from Kamtschatka, the Aleutian and Kurile islands, and Russian America, which articles are here exchanged for European goods sent from St. Petersburg and Moscow by the way of Tobolsk. It has also some trade with Bokhara and Khokan, and is the most important town in Siberia for the extent and activity of its trade. An annual fair is held here in June. It has a college, or high school, in which navigation and the Chinese and Japanese languages are taught. Irkoutsk is 3,994 miles from St. Petersburg, 750 from Nertshinsk, 1,000 from Zurukaitu, 1,950 from Tobolsk, 340 from Kiakta.

Yakoutsk, the capital of the province of the same name, is situated on the Léna, in 60° north latitude, and 130° east longitude. This town has a population of about 7,000, and is the centre of commerce of eastern Siberia, for all kinds of furs, walrus teeth, &c. The country abounds with cattle; and salt, iron, talc, &c., are said to be plentiful. The extreme temperature of summer and winter is perhaps greater than at any other place on the globe; the thermometer rising in the shade in summer to 106 Fahrenheit, and falling in winter to 83° below zero. Notwithstanding these extremes of temperature, it appears that the culture of rye succeeds perfectly under favorable localities in those regions; and that at Amguinsk, near Yakoutsk, the crops of grain are even more abundant than in Livonia. Besides the discovery of curious new animals, Professor Von Middendorf has ascertained that while rye, turnips, beet-root, and potatoes grow on the Yenesei, in latitude 61° 40′, indigenous plants requiring less warmth flourish much further north, and that forest trees, with vertical stems, reach to about 72° north latitude, in the parallel of the longitude of Tamyr.

The inhabitants of Yakoutsk have cellars in all their houses, made in the frozen ground—such precisely as we make in houses in this country. In summer, when the heat is as excessive as the cold is in winter, they place all their fresh provisions, such as meat, milk, and fish, in these cellars, where everything becomes frozen in two hours. The Imperial Russian-American Company bored for water in the court-yard of their establishment at this place to the depth of 380 feet; the ground was still frozen and no water found; the frozen sub-soil is supposed to be 600 feet in depth.

The Yakouti are very industrious; young and old, male and female, being always occupied in some useful employment. When not engaged in hunting, travelling, or farming, men and boys make saddles, harness, &c., while the women and girls keep house, dress skins, prepare clothing, and attend the dairy. They are also remarkably kind and hospitable to strangers, and the best things they have are always freely offered to travellers. They have a singular mode of estimating distances; they take as their unit the time necessary for boiling a particular sort of food; and tell you that such and such a place is so many kettles off, or half a kettle, or, as the case may be, only part of a kettle.

From Yakoutsk to Okotsk is about 640 miles, and to Irkoutsk about 1,620 miles.

Nertshinsk, in 51° 29′ north latitude, the chief town of a district of the same name in Siberian Daouria, is situated east of the Yablonoi mountains, on the river Chilka. one of the affluents of the Amur, and has a population of about 3,000. It is a place of considerable trade, and abounds in mines of gold, siver, tin, lead, and zinc, which are worked by the worst class of convicts sent thither for the most heinous offences. It is the penitentiary of Siberia.

The harbors and ports of Siberia on the sea Okotsk, particularly *Okotsk*, in 59° 20′ 22″ north latitude, and *Ajan*, are eminently convenient for foreign commerce. The factory of the Imperial Russian-American Company was transferred from the former to the latter port in 1846. The navigation of the sea is open from June till October. The principal food of the inhabitants of Okotsk is fish, on which they feed themselves, their dogs, cattle, and poultry. All other provisions are exorbitantly dear. Flour costs 28 paper roubles* per pood. Beef is so dear as to be rarely eaten, and wines and groceries have to pay a land carriage from St. Petersburg of 7,000 miles.

Ajan lies south of *Okotsk*, and is more favorably situated for commercial operations. From hence the company propose to introduce agriculture amongst the nomadic tribes of the vicinity, and establish commercial relations with the Guiliacks, spread over the frontier of Manchuria, not far from Ajan. Some families of this nomadic race have been recently located near the river May. The essays which they have made in the culture of wheat have succeeded at Okotsk.

The Shantar islands, near the southern extremity of the sea of Okotsk, abound in valuable fur-animals, and are still little visited by the hunters. They derive their name from Shantar, a Guiliack word, signifying "island." The group is composed of Falsikoff, Great Shantar, Little Shantar, and Bielotchi islands, among which there is good anchorage.

There is said to be a good harbor at the entrance of the river Uda, on which the town of *Udskoi* is situated, about 40 miles from its mouth. Between the Uda and the frontier of Manchuria, there are two small rivers, the Toron and Tugary; the latter has its outlet in a bay, on which the small town of *Tugary* is situated.

At the most northern recess of the bay of Ishijinsk, one of the great inlets of the sea of Okotsk, is the small town of *Ishijinsk*, in 54° 36′ north latitude, and 104° 33′ east longitude, with 500 inhabitants, who chiefly live on the produce of their fishery, but have also some commerce with the Koriacks.

The country of the Tchuktsches extends from Behring's strait to the country of the Koriacks, between the 64th and 71st parallels. The valleys are filled with morasses and small lakes; the mountains are of moderate height. The inhabitants are fishers and hunters, and amount to about 10,000. There is a tradition among the Tchuktsches that the strait which separates them from the opposite shore towards the north was not formerly covered with ice, and that the natives passed it in their baydars, or boats, made of whalebone.

The Tshuktsches, who inhabit the country to the north of the river Anadyr, have defended themselves with valor and success against the Russians, and pay no tribute. That portion of the nation who live in permanent habitations belong to the family of the Esquimaux, who seem

* The paper rouble is equal to 20 cents United States currency.

to have emigrated from America, and maintain an intercourse between the two continents. The island of Imaklit, one of the group of the Diomeda, or Gwosdef islands, is generally the place where the exchange of goods takes place. The most active traders are the American inhabitants of the two small islands called King's islet, or Ookiosh, and Asiak or Ajak, especially those of the last mentioned island, who dispose of the Russian goods which are obtained from the Tshuktsches along the coast of America, as far south as the peninsula of Aliaska, and would probably carry them still farther to the east, if the settlements of the Imperial Russian-American Company did not provide the tribes in those parts with such articles.

The Tshuktsches, as well as the Americans, visit the island of Imaklit in summer in their baydars, and in winter in sledges, which are drawn by dogs. The Tshuktsches bring tobacco, some iron utensils and ornaments obtained from the Russians, with a considerable number of reindeer dresses, as this animal does not appear to be common in any part of North America. The natives of the islands of Asiak bring a variety of furs and a great number of morse tusks. The American tribes which inhabit the country north of cape Prince of Wales, as far as Icy cape, also visit the island of Imaklit to obtain Russian goods. The knowledge of the extensive commerce thus carried on between the two continents by savage tribes, which we owe to Admiral Von Wrangel, explains how the iron pots and knives which Captain Beechy found among the inhabitants of Icy cape, and the knives which Franklin saw on the northern coast of America, and which were all of Russian manufacture, found their way to those remote places.

The Koriaks inhabit the country between the Anadyr and the peninsula of Kamtschatka. They are divided into two classes: the one of which are located—the other pursue a nomad life. The former are chiefly found on the shore of the sea of Okotsk, where they dwell in villages resembling those of the Kamtschatkadales. Their numbers amount to about 2,000: they are subject to Russia, and pay an annual tribute

Kamtschatka.—The peninsula of Kamtschatka is about 800 miles long, by 100 to 200 broad, and forms part of the Siberian provincial government of Irkoutsk, with a population of about 6,000. The natives call themselves Itlemen. It was first discovered and settled by the Russians in 1696; is mostly sterile, rocky, and mountainous, and has several volcanoes in constant activity. Pic de Kluchevsk, which was visited and described by Professor Erman, a few years since, is stated to be upwards of 15,825 feet above the level of the sea.

The country abounds in bears, lynxes, sea and river otters, reindeer, foxes of different colors, sables, beavers, seals, walruses, &c. Salmon, and a variety of other fish, are found in the rivers and on the coasts, and whales are numerous. The inhabitants are chiefly employed in hunting, fishing, and whaling; furs, dried fish, and whale oil, are the principal exports. The Siberian dog serves as an animal for draught among the Kamtschatkadales and Ostiacks; the domestic reindeer is used for the same purpose; its milk and flesh serve for food, and its skin for clothing, among the Samoyedes and Tungouses.

Petrapaulski, the principal town of Kamtschatka, lies in 53° 5′ north latitude, and 201° 16′ west longitude, in the bay of Avatska, east coast; there are several smaller settlements on the same coast, and on the sea of Okotsk.

It is understood, upon the authority of Sir George Simpson, that Kamt-

schatka is to be placed, under the administration of the Imperial Russian-American Company, upon the same footing as the Russian American colonies and islands in the northern Pacific.

In Russia, corporal punishments are much in use; criminals are seldom put to death, but are sent off to Siberia for almost every kind of offence, from the highest political crime to petty larceny. The most heinous offenders, according to Sir George Simpson, are sent to the mines; those guilty of minor delinquencies are settled in villages, or on farms. Statesmen, authors, and soldiers, banished thither for political offences, are generally permitted to establish themselves in small communities, where they spread refinement through the country. As a natural consequence, he observes that "all grades of society are considerably more intelligent than the corresponding grades in any other part of the empire; perhaps more so than in any part of Europe."

Many of the exiles are men of large income; and he adds: "In fact, for the reforming of the criminal, in addition to the punishment of the crime, Siberia is undoubtedly the best penitentiary in the world. When not bad enough for the mines, each exile is provided with an allotment of ground, a house, a horse, two cows, agricultural implements, and, for the first year, with provisions. For three years he pays no taxes whatever, and for the next ten only half the full amount. To bring fear as well as hope to operate in his favor, he already understands that his very first slip will send him from his home and family to toil in the mines. Thus does the government bestow an almost paternal care on the less atrocious criminals."

In 1840, the number of *colonist exiles* in Siberia amounted, according to M. Tchihatcheff, to 134,630, of which 64,000 were established in western Siberia, and 70,290 in eastern Siberia. Among the latter, 11,000 were employed in the gold mines. The number of that class of exiles sent to Siberia from 1839 to 1841, inclusive, amounted to 3,617.

The Burats constitute one of the divisions of nations into which the Mongols are divided; these are the Mongols proper, Eleuths, and Calmucks. Their language is a dialect of the Mongolian, but much harsher in its pronunciation. They inhabit the mountainous country enclosing lake Baïkal on the west, and south from the mouth of the river Bargoosin, on the east side of the lake, to the sources of the Léna on the west. The various tribes subject to Russia embrace an aggregate population of nearly 300,000 souls. Each tribe is governed by its prince, or Taïsha. The richest of their princes, according to Cochran, has 23,000 subjects, and occupies the country between Selengensk and Nertshinsk. They have embraced the Budhism of the Lamas, and cultivate the language and literature of Tibet. The other tribes profess Shamanism.

Most of the tribes are nomadic. They have large herds of horses, black cattle, sheep, and camels. Their chief wealth consists of horses, the flesh of which, and mares' milk, constitute their principal diet. They have made considerable progress in some of the arts of civilized life, especially in working iron and tanning, and possess the art of plating iron and silver by a simple process. Tanning is only practised by the women. who evince in this branch of industry great ingenuity and much taste, The women also make all the woollen stuffs which are in use among them for dress, blankets, coverings for their yourtes, or summer tents, &c. Their dwellings, for both summer and winter, are said by travellers to be very convenient, comfortable, and well adapted to their climate and no-

madic life. Many of the Burats are rich, and possess herds of 1,000 to 5,000 cattle.

About 30 years since, an English protestant mission was sent amongst the Budhist tribe. The Burats were zealously opposed to any change in their religion, and about two years after the arrival of the missionaries, procured from Tibet, at an enormous expense, thirty wagon loads of Budhist books, which they distributed among all the families of their tribe, to counteract the efforts of the missionaries for their conversion.

The missionaries studied the Russian, Mongolian, and Tibetan languages; established a press in the town of Selengensk, and translated and printed Holy Scriptures in those languages; but after laboring for nearly 25 years without making any converts, their mission was at length broken up by order of the Emperor of Russia.

Western Siberia comprises the whole region from the frontier of the government of Orenburg northward to Tobolsk.

Omsk, in 55° north latitude, the new capital of Western Siberia, stands on the confluence of the Om and Irtysh, in the midst of a sandy plain. The town is still in its infancy, having but lately supplanted Tobolsk. It has been selected as the seat of the general government, chiefly with the view to the gradual subjugation of the Kirghiz, who occupy the vast intervening tract of country as far as the Caspian sea. The present population is about 8,000, with a garrison of 4,000 men. As to the civil government, Omsk still depends on the ancient city Tobolsk, which continues to be the capital of the united provinces of Tobolsk and Omsk.

One of the principal objects in the transfer of the government of Western Siberia to Omsk in 1840, was with the view to the organization of Russian military posts through the Kirghiz steppes, in the direct route to the frontier of Tibet, from which it is distant about 1,000 miles. In 1842, they had established military stations upon 600 miles of the route, which have been subsequently extended to Tibet, where the Russians have now obtained a firm footing, and have extended their caravan trade thence to western India.

There is a military school at Omsk, at which 60 noble youths, and 120 Cossacks, are taught drawing, algebra, the oriental languages, history, and fortifications, and are intended for interpreters and agents in the east. It is 2,490 miles from St. Petersburg.

Tobolsk is situated on the river Tobole, in latitude 58° 2′ north, and longitude 68° 35′ east, with a population of about 20,000. It is the seat of the civil government of Western Siberia, and the see of an archbishop, who has jurisdiction over all Siberia.

In this government iron and copper are extensively mined and prepared, especially in the Ural chain; and there are tanneries, felt manufactures, soap and tallow works, and various common fabrics, in different places. The fur and hide trade and transit trade employ a great proportion of the inhabitants. There are some coarse cloth, leather, and soap manufactories at Tomsk and other places. There is a regular and extensive commercial intercourse, by caravans of camels, between Tobolsk and the town of Tashkend in the Khanate of Khokan, Central Asia. From Tobolsk to St. Petersburg is 2,076 miles.

Tomsk, the capital of the government of Tomsk, is built on the right bank of the Tom, near its mouth. It has a population of 10,000, and is 2,990 miles from St. Petersburg. *Kolyvan*, on the river Belaya, in the centre of the Altaï mountains near lake Kolyvan, is surrounded with al-

most all the valuable stone which Siberia contains. Immense blocks of porphyry, agate, jasper, various kinds of fine grained granite and marble, are here collected, to be prepared for the imperial palaces at St. Petersburg and elsewhere. There is a government establishment for working ornamental vases, columns, and other objects of art.

Ekaterinebourg, in 57° north latitude, is the centre of the mining district for the Uralian mountains. The population amounts to 14,000, who are all connected with the mines. Besides its mining works, conducted by the imperial government, and by M. Jacobleff, the richest individual of the Russian empire, this town is noted in common with Kolyvan, and other places in Siberia, for the polishing of precious stones by water power, including the porphyries, agates, jaspers, and malachites of the adjacent mountains.

Nijny Talgilsk is a mining town of the Demidoff family, situated on the eastern flank of the Ural, where 22,000 well-ordered and comfortably-housed inhabitants are gathered together under directors, whose skill and science have earned for them the eulogy of Humboldt. In addition to hospitals and schools, in which even the sciences are taught, Prince Anatole Demidoff has caused a trigonometrical survey of the extensive property of his family to be made by French engineers. The net annual income derived from the various mining establishments of the family, is said to exceed $2,500,000; but it does not equal that of M. Jacobleff, who is reported to be the largest proprietor of mines in Siberia.

Semapalatinsk, in the circle of Biisk, is a neat garrisoned town, with a population of 8,000. It is the mart of an extensive trade with Central Asia and China, and is considered as the garden of Siberia. Its immediate environs produce about 800 different sorts of flowers and shrubs.

The principal articles of export from Semapalatinsk and Omsk to China, are cotton goods, hardware, raw and tanned hides, and cloths of ordinary quality. The imports consist exclusively of tea and a Chinese silver coin called yamba.

The following is an official statement of the commercial movements of Semapalatinsk during a series of seven years, from 1836 *to* 1842, *in bank roubles:*

Years.	Exportations.	Importations.		Receipts of the custom-house.	
		Merchandise.	Specie.		
	Roubles.	*Roubles.*	*Roubles.*	*Roubles.*	*Copecs.*
1836 -	270,288	210,656	426,600	21,876	38
1837 -	349,928	212,750	369,500	18,186	56
1838 -	490,918	250,670	370,800	21,446	80
1839 -	420,074	311,714	370,400	33,929	12
1840 -	551,785	719,312	299,850	148,210	70
1841 -	886,650	674,906	87,507	162,195	38
1842 -	646,326	561,681	311,814	91,106	58

Bukturima, also a frontier town, is romantically situated on the small river of the same name, a tributary of the Irtysch. In its vicinity commences the boundary line between Asiatic Russia and China.

Petropavslok, on the Ischm, is another frontier town of considerable trade with China.

An increasing clandestine trade is carried on between the town of *Biisk* and Mongolia, across the Tchouya, on the Chinese frontier. The exports of the Russians consist principally of cloths, velvets, hides, printed cottons, fowling pieces and shot, furniture, kettles, kitchen utensils, hardware, &c., for which returns are made in brick tea, and a Chinese silver coin, known in those countries by the name of yamba.

The town of *Orenburg*, on the Ural, is the great emporium of the Russian caravan trade with the Kirghiz horde, Bokhara, Khokan, Khiva, Tibet, Persia, &c. The Chinese and Usbeck merchants from Turkestan and Hanse assemble there to meet the Russian traders, and carry on a valuable traffic. From these regions, as well as from northwestern China, small parties of native merchants start for Semapalatinsk and Troisk, in Siberia, where a similar, but not such an extensive traffic, takes place.

In addition to the traffic going on daily and weekly with the Kirghizes, there are periodical arrivals and extensive caravans from Tibet, Bokhara, and Khokan. Armenians, Bokharians, Kirghizes, and many other Tartar traders, pass extensively backwards and forwards on their trading expeditions, being able to cross the Chinese frontier without molestation. Silk and cotton goods, coarse woollen carpets, calicoes, dried fruits and turquoises, are the common articles of exchange against leather, furs, glass, iron, and common crockery. The traffic is very extensive, and constantly increasing; and Mr. Cottrell observes, "when the various amounts of imports and exports are added together all along the frontier from Orenburg to Kiakta, the gross sum will, we believe, turn out far greater than people usually imagine." Montgomery Martin estimates the aggregate annual value of the Russian overland trade with China and Central Asia at upwards of four millions sterling.

The town of *Zlatäûst*, in the Ural mountains, is the great centre of the southern imperial mines, and celebrated for its steel manufactures, in which the Russians have made surprising progress within the last few years under the direction of General Anósoff, a skilful metallurgist, whose damasked scimitars, as well as every description of ornamental steel, are said to equal, if not surpass, the similar products of any other country. Captain James Abbott, a British officer, who travelled from India, by Khivah, to Russia, in 1840, gives a very elaborate criticism, in the narrative of his journey, on the damasked swords of the east, and on those of Zlatäûst in particular, in which he observes: "The general fault of European blades is, that being forged of sheer-steel, for the sake of elasticity, they are scarcely susceptible of the keen edge which cast steel will assume. The genius of Anósoff has triumphed over this objection—not in hardening the soft steel, but in giving elasticity to the hard; and it may be doubted whether any fabric in the world can compete with that of Zlatäûst in the production of weapons, combining in an equal degree, edge and elasticity."

Professor Von Middendorf, aided by learned friends, is actively engaged with the account of his important "Expedition and Exploration in Siberia;" and the Imperial Academy of Sciences of St. Petersburg has been

charged to advise as to the means and style of publication. Count A. Von Keyserling is occupied with the fossils collected during the expedition. On the completion of this work, the Count will conduct an exploratory expedition along the eastern flanks of the Ural mountains, from 60° north to the Glacial sea, under the direction and patronage of the Imperial Geographical Society of St. Petersburg. Another scientific expedition is employed in Siberia under the direction of M. Castren.

Professor Von Middendorf read a paper before the British association for the advancement of science, in September, 1846, on the geographical boundaries and some of the characteristic peculiarities of the different native Siberian tribes.

1st. The Ostiaks: these were stated to be of Finnish origin, on physiological and philological evidence. 2d. The Samoyedes, who were of Mongol descent. 3d. The Tungouses. 4th. The Yakouts; the extent to which Mongol features were found in a nation speaking a language akin to Turkish, was insisted on. 5th. The Yukagin; the physical peculiarities of which placed them along with the Samoyedes. 6th. The Aïnos; these were the inhabitants of the Kurile islands, at the mouth of the Amur; of these there were two types, the Finnish and the Japanese. 7th. The Katchell; these were only known through the Aïnos.

2. Russian overland trade with China at Kiakta, &c.

Kiakta is a Siberian frontier town in the government of Irkoutsk, lying in 50° 21′ north latitude, and 106° 29′ east longitude. Its name is derived from a Mongol word for a species of grass growing in the neighborhood, affording excellent pasture for the camels which arrive there in the caravans. It is called by the Russians Troitsko Sauskaia. The town is commanded by mount Borrgueltai, or "eagle mountain," which the Chinese reserved to themselves in the last demarcation treaty, on the pretence that it contained the tombs of their ancestors. It is situated on a small streamlet, also called the Kiakta, which is here the boundary between Siberia and China, falling into the Selengá, and communicating with lake Baïkal, Irkoutsk, and the river Angará, a branch of the great river Yenesei. The town contains about 5,000 inhabitants, is 2,480 feet above the level of the sea, and within the distance of half a mile from the Chinese town of Maimatchin, or "trading mart," in Mongolia. Maimatchin is also called Daï Oergo in Mongolian, and Chadaldatchin in Manchu. The district is governed by a counsellor of chancery and a director of the customs, who conduct, between them, the judicial, political, military, and commercial affairs. Kiakta is 55 miles southeast of Selinginsk, 180 southeast from Irkoutsk, 4,174 from St. Petersburg, and 1,030 from Pekin.

Kiakta has fourteen merchants of the first guild, but only seven of them have fixed residences in the place. The others, who reside at Irkoutsk, and in European Russia, employ factors, and only visit the place occasionally. A school for instruction in the Chinese, Mongolian, and Manchu languages, was established in 1835. The young men taught in it are employed as interpreters. The number at present in the college is sixteen.

The Russians are prohibited from trading at the ports of China proper, in consequence of the privilege they have long enjoyed of an overland

commerce at this place. Of late years this trade has become of great and increasing importance, and the attention of commercial men connected with China has been called to the Russian woollen manufactures, which have begun to compete successfully with those of English manufacture, which formerly supplied the Chinese market.

By the treaty of 14th June, 1728, between Russia and China, Kiakta and Maimatchin are made entrepôts of the overland trade between the two countries. Russia has had at Pekin, since the conclusion of the treaty, a convent or college, composed of six priests and four lay members, for celebrating the ritual of the Greek church, and teaching the Russian, Chinese, Mongolian, and Manchu languages. In this respect, Mr. Macgregor considers Russia has great political and intelligent advantages over England in her trade with China.

The Imperial Russian-American Company carry to the fair which is held at Kiakta between January and March, the furs, peltries, sea-horse teeth, &c., collected at their trading establishments on the northwest coast of America, Kamtschatka, the Aleutian and Kurile islands. It is also frequented by Russian traders with Siberian furs, dressed sheep and lamb skins, woollen manufactures of various kinds required for the cold winter climate of northern China, Mongolia, and Manchuria, coarse linens, leather, cattle, specie, &c., to exchange for the raw and manufactured silk, porcelain, rhubarb, sugar candy, musk, and especially the teas of China.

The tea* imported at Kiakta, which is so highly reputed for its quality, on the ground of its passing overland, is still carried chiefly by water; first from Kiakta, by land, to Tomsk, on the Irtysch, a distance of more than 1,000 miles; thence by water down the Oby to its confluence with the Irtysch, and then up the latter to Tourmine, where it is landed and carried overland to Perm. It is then carried in boats down the Kama to its junction with the Volga, and up this river to Nishney-Novgorod, where part of it is sold at the great annual fair in July at a large profit, and the remainder sent to Moscow for distribution and consumption in European Russia.

The tea of the finest quality is classed into flower and family tea, both of which are said to consist of pekoe. It is grown in the north of China, and said to be much superior to any shipped at Canton or Shanghai. This is owing to the leaf being less fired in the process of curing. Many of the finest teas drunk in China would not bear a long sea voyage in the hot and humid atmosphere of the hold of a ship, and therefore the teas conveyed to Europe and the United States by sea are required to be dried and fired to a degree that must injure their quality.

A considerable portion of the tea imported at Kiakta, and other marts on the Siberian frontier, is called brick tea. The Mongols and most of the nomads of Central Asia make use of this tea; it serves them both for drink and for food. The Chinese carry on a great trade in it, but never drink it themselves. In the tea manufactories, which are for the most part in the Chinese government of Fokien, the dry, dirty, and damaged leaves and stalks of the tea are thrown aside; they are then mixed with a glutinous substance, pressed into moulds and dried in ovens. These blocks are called by the Russians, on account of their shape, brick tea. The Mongols, the Burats, the inhabitants of Siberia beyond lake Baikal, and the Kalmucks, take a piece of this tea, pound it in a mortar,

*See note on tea at the end of this article.

made on purpose, and throw the powder into a cast-iron vessel, full of boiling water, which they suffer to stand a long time upon the fire, adding a little salt and milk, and sometimes mixing flour fried in oil. The weary traveller may at all times boldly enter a tent and quench his thirst with brick tea; but he must have his own wooden cup, which every Mongol carries about with him, as an article indispensably necessary. The most esteemed of these cups come from Tibet; the rich generally have them lined with silver.

This tea, or broth, is known by the name of satouran. M. Timkowsky says he drunk tea prepared both ways, and found it palatable enough; at least very nourishing. All depends on the skill and cleanliness of the cook. This brick tea serves also instead of money in the dealings of this people, as well as in Daouria, on the frontier.

Tea made up into balls and rolls, or compressed into flat cakes, is also exported by the Chinese to Tibet, Burmah, &c., and when boiled with milk, is said to constitute an agreeable and stimulating beverage.

The following is an official statement of the commercial movements of Kiakta, from 1825 *to* 1842, *in paper roubles,* = 20 *cents United States currency.*

Years.	Exportations.	Importations.	Receipts of the custom-house.	
	Roubles.		*Roubles.*	*Copecs.*
1825 -	10,818,639		6,315,858	10
1826 -	12,078,157		7,012,643	13
1827 -	14,032,562		8,141,653	27
1828 -	14,697,561		8,076,554	24
1829 -	16,350,664		8,289,781	6
1830 -	11,456,195		7,070,562	37
1831 -	13,306,879		7,088,821	10
1832 -	16,175,607		9,410,606	66
1833 -	14,863,038		9,113,072	67
1834 -	16,239,196		9,308,923	62
1835 -	17,422,990		9,545,698	3
1836 -	22,588,027		11,263,135	57
1837 -	20,220,812		11,096,418	24
1838 -	18,363,980		10,525,847	47
1839 -	22,628,366		11,484,710	9
1840 -	31,637,132		15,535,897	48
1841 -	33,916,622		17,466,750	58
1842 -	30,135,257		19,178,864	36

The value of the imports corresponds with that of the exports.

In 1845, the Russian trade at Kiakta amounted to 13,622,000 silver roubles, (a silver rouble = 75 cents United States currency.) Russia received 140,000 chests of tea, chiefly pekoe, a considerable quantity of raw and manufactured silks, cotton cloths, called *daba* and *kitaia*, rhubarb, porcelain, sugar candy, musk, tobacco, rice, artificial flowers, tiger and panther skins, rubies, coloring matters, canes, &c. The Chinese took in return furs, peltries, leather, tanned hides, Russian cloths, velvets,

camlets, druggets, white flannels, stuffs, woollen, linen, and cotton cloths, glassware, hardware, tin, talc, specie, cattle, provisions, flour, &c. The daba and kitaia is a sort of thick calico of different colors, brought from China, through Bokara, into Russia in large quantities, and is extensively used for the apparel of both men and women. The Chinese kitaia is the best, of which there are two sorts. Daba is a very strong stuff, of a beautiful red color, without gloss; it is narrow and not unlike coarse calico. The other is coarse, but more durable. Great quantities of cotton stuffs, and calicoes of gay colors, are also brought by the Chinese from Mongolia, called Selenskaia, from a city of the name of Selein. They are generally of gay colors, as red, green, yellow, blue, and made up in bundles of rolls, each 20 ells long. Some of their finest silk stuffs, embroidered with gold, sell readily in St. Petersburg for 250 paper roubles per ell.

A great portion of the Chinese grandees wrap themselves up in costly Siberian and American furs. The Mongols living in China near the frontiers make great use of the Russian cloths, and of hard iron wares and leather. The exports of Russian woollen and cotton cloths to China and Central Asia are constantly increasing; goods of this description are now extensively manufactured chiefly at, and near, Moscow. The Russian woollen cloths, called by the Chinese *ka-la*, are greatly preferred by them to those of English manufacture, and which they have almost entirely superseded in the China market, particularly at Ningpo, Shanghai, and Suchau.

The pieces are from 19 to 30 yards in length; the breadth varies from 62 to 64 inches. It is made up in packages of five pieces, and an assortment usually contains 50 pieces blue, 35 pieces black, 10 pieces scarlet, 2 pieces ash, and 5 pieces green. The Russian woollen cloths are of different qualities, similar to those of the English called "Spanish stripes," and "habit cloths." They are classed in three varieties: 1st, Mezeritsky cloths; 2d, those of Masloff, or Maslovia; 3d, Karnavoy cloths. In each variety are four or five grades of quality.

The assortment of colors in 100 pieces of Mezeritsky is, blue 40 pieces; light-blue, 10 pieces; black, 20 pieces; violet, 2 pieces; yellow, 1 piece; red pomegranate, 8 pieces; brown-violet, 4 pieces; scarlet, 10 pieces; green, 3 pieces; and "fashions of the day," 2 pieces.

These are packed in 10 bales, each having an assortment of the different colors. The first quality of Mezeritsky cloth costs at Moscow 150 to 165 paper roubles per piece of 25 arsheens, (6*s*. 9*d*. to 7*s*. 4*d*. sterling per yard,) and the charges from Moscow to Kiakta amount to about 250 paper roubles per bale; they measure from 60 to 67 inches in width. The first quality of Masloff cloth costs at Moscow from seven to seven and a half paper roubles per arsheen, (8*s*. to 8*s*. 6*d*. sterling per yard;) the length of the pieces 40 to 45 arsheens, or 31 to 35 yards; breadth between the lists, 67 to 70 inches. They are made up in bales of eight pieces each. In an export of 1,000 pieces of these two cloths, the proportions are about 750 to 800 pieces of Mezeritsky, and 200 to 250 pieces of Maslovia.

Prior to 1844 large quantities of Turkey opium were imported free of duty, and smuggled into China by the Russian traders. By the present Russian tariff the drug is subject to a duty of 40 silver roubles per pood, which is considered as implying prohibition. The contraband trade however, in this as well as in every other article, both at that mart and along the extended Chinese frontier of 3,000 miles, is said to be very con

siderable. Camels and a few mules are used to transport the coarser goods, but the fine quality teas are conveyed in carts, each of which is generally drawn by one ox, and they travel at the rate of about 14 miles a day. M. Timkowsky thus describes them in his journal:—"The Mongol carts generally have only two wheels, which turn round with the axle. The wheel is formed of two small square blocks of wood fastened together in the shape of a cross, and the interval filled up with rounded wedges, instead of felloes; the axletree is fixed in the centre, so as not to project beyond the wheels." The ordinary teas are generally conveyed in winter, by camels, because it is made of the leaves in a state of maturity, and cannot be forwarded sooner from the province of Fokien to Kalgan, and thence to Russia. The town known to the Russians by the name of Kalgan is Tchangka-keou, and is situated a few miles south of the great wall, and about 100 north of Pekin. Kalgan is the key to the commerce of China with Russia, and in part also with Mongolia. All merchandise destined for the markets of Russia is collected here, and conveyed across by caravans. Merely the conveyance of the Chinese merchandise from Kalgan to Kiakta, and that of the articles which the Chinese have exchanged with the Russian merchants, is a great source of profit to the Mongols, as they employ their camels, and the Tsakhars their oxen. They receive payment from the Chinese in silver, but principally in merchandise.

From Kiakta through the country of the Kalkhas, to Oubur Oude, a distance of some 500 miles, M. Timkowsky states that the road, as in all Mongolia, is in general mountainous, and covered with gravel. From Oubur Oude the road passes through the country of the Eastern and Western Sounites to that of the Tsakhars, a distance of about 250 miles, and from this place to the frontier of the Tsakhars grass is rare, the water brackish, the road in general sandy. Elsewhere we find that the Sounites inhabit either the whole or a part of the desert of Gobi, a sterile tract intersected by lofty barren mountains. The third portion of the road, through the country of the Tsakhars to the great wall of China, is about 150 miles in length. The steppe abounds in pasturage. There are small rivers and lakes. From Nortian, the first village in China, to Pekin, is rather more than 120 miles, with a very fatiguing road over the chain of mountains Kinkan Dabakhin, which separates Mongolia from China. All merchandise, therefore, from Pekin, must travel through this 1,000 miles of inhospitable country, and then after it has safely arrived at Kiakta, must be conveyed 4,300 miles further before it can reach St. Petersburg.

The duties paid by the Russians at Kiakta are, on furs 25 per cent.; other articles 20 per cent.; with one per cent. for deepening the river Selengá, and seven per cent. towards the custom-house. They carry on a profitable trade in China, and find a ready market for their inferior furs, which would not pay transportation from the coast of Siberia to European Russia; whilst good furs bring a high price in China, and are generally too expensive for the home market: in exchange for their furs they get articles which they would not be able to obtain on as good terms from the European nations.

The transactions of the fair are regulated by a board of trade, composed of Russian merchants, who are annually elected under the direction of the custom-house at Kiakta, and arrange with a corresponding board of

Chinese traders at Maimatchin the price of every article to be exchanged, to which a relative value is fixed on the Chinese article. This is done in writing and is unchangeable, and no transaction is permitted, except upon these terms. The traffic in opium is strictly prohibited.

The charges on a chest of tea from Kiakta to Nishney-Novgorod and Moscow are stated to be as follows, viz:

Specification of charges.	Flower Tea, weighing 60 lbs.	Family Tea, weighing 65 lbs.	Family Tea, weighing 80 to 85 lbs.*
	Roubles.	*Roubles.*	*Roubles.*
Import duty and custom-house charges - -	130	138.50	160
Commission at Kiakta -	10	4.80	6.40
Packing in hides - -	3	3	3
Receiving, weighing, and cartage in Kiakta -	10	10	10
Carriage to Nishney-Novgorod and Moscow -	35	35	50
	188	191.31	229.40

* 40 Russian pounds = 36 avoirdupois.

The prices, which have been unaltered for years, are as follows:

Roubles, 60 for one chest quadrat family tea.
" 120 " " third sort flower tea.
" 80 " " Polootornay family tea ($1\frac{1}{3}$ as large.)

The prices of Russian produce were raised in 1843 from those of former years, and it was also arranged that one chest of family tea is to go along with every chest of flower tea.

The secret instructions from the government of China to their licensed merchants at Kiakta display great cunning, duplicity, and meanness, and are characteristic of the uniform policy observed in their intercourse with the "foreign barbarians." The Chinese traders are moreover charged by the Russians with trickery and unfair dealing, by giving short weight in teas, and short measures in silks and cotton goods.

The following is a translation of the secret code, or abstract of instructions for the guidance and government of the Chinese traders at that mart:

"The end and aim of every commercial nation should be to prevent the advantage being on the side of the foreigners.

"1st. To do this effectually, all letters received by any one of the licensed merchants from their partners are only to be opened in a public assembly, so that all may act in concert against the foreigners.

"2d. Discover what articles the Russians are most in need of, and what price they sell for in Russia. Every member is to strive with all his might to obtain information on this head, and lay it before a general meeting; when the president will give to each a note which will state the quantity of each article he is to purchase, and the price he is to buy them at; and likewise those which he is to withhold.

"3d. The least display possible as to the quantity of Chinese goods that may be brought for sale; do not appear anxious for Russian goods.

"4th. The Chinese goods should be at all times less in quantity than Russian; that no fresh goods should be brought forward until the old ones are sold off.

"5th. Let no eagerness be shown for any article of Russian manufacture; no matter how much any one member may wish to procure it.

"6th. When the Russians are scantily supplied with any valuable article, great eagerness should be displayed to purchase the whole stock, saying that it was in good demand, and then to be equally divided between each merchant; the consequence will be, that the next year a large stock will be brought to market, and great bargains will be procured by stating that the demand has ceased, and thus gain advantage to the nation.

"7th. If the Russians should raise the price of any article that was scarce, no one should buy anything for a month. If they complain to us, we will tell them the trade must be stopped.

"8th. Tell the Russians that the quantity of goods on hand is much less than it really is; and likewise tell them that China has no silk or cotton to dispose of.

"9th. No license will be granted to trade at Kiakta, unless the merchant is able to write and speak the Russian language; and that will prevent the necessity of the Russians acquiring a knowledge of the Chinese; and thus preserve the secrets of trade and the policy of the government.

"10th. Treat the Russians with politeness on all occasions, and even show them acts of hospitality, which will enable you the better to learn how their country is governed; but on no account sleep in the same house with them.

"11th. No merchant to transact business for one year after his arrival at Kiakta; but during that period to learn thoroughly all the secrets of the trade, and thus prevent mistakes.

"12th. Prohibits gold, silver, copper, and iron, from being exchanged with Russia.

"13th. Proscribes the introduction of all articles of luxury, wine, spirits, &c."

There are various punishments awarded for a violation of these rules. For disclosing the nature of the above instructions to the Russians, death or banishment for life; for lesser crimes, mistakes, &c., to pull the grain boats five years.

The trade of the interior of China, the prices, demand, &c., are to be kept a profound secret.

The Chinese tea merchants are noted for their excessive politeness and tact in puffing their wares by pompous advertisements, to draw customers. The following specimen of their skill in this line is a literal translation of the advertisement of a tea dealer in Maimatchin:

"TIEN-CHOUN-IIOU-DZE.

"It is well known to all the gentlemen tea commissioners that teas of a superior quality come from the hills of Ou-ish, and the banks of the river Tseï, where the plant grows very abundantly. Whoever has visited those places will assure you that the air of the country is endowed with an extraordinary productive power, which increases and improves the

plant, imparting to the leaf a brilliant color, pleasing to the eye, and a peculiarly delicate flavor.

"We are well aware that teas called the Loun-towan, 'sleeping dragon,' and Fin-ïan, 'small eyes of the king of birds,' have heretofore appeared in this market; but it was a mere deception. Impudent swindlers thus attempted to deceive the public by selling an inferior mixture under these celebrated names, and by such frauds did a great injury to the fair dealer.

"With the view of protecting the public in future against the rapacity of such persons, I have had two seals engraved on jasper. Hereafter all the packages of tea that leave my depot will be sold under the signature *Io*, and will moreover bear the impress of those seals, one of which, of a round form, indicates the place of my birth; and the other, of my tea warehouse. I, therefore, beg the most respectable public to examine my stock, to be assured that the tea which I advertise is in fact the produce of the crop gathered in the nine celestial districts of the province of Dziou-tsouï-man-ïan."

The head of the Chinese board of trade and municipal government of Maimatchin, called the Dzargotchi, is always a Manchu of the royal race, whose term of service is three years, after which he returns to Pekin. If the people are satisfied with him, they accompany him on his departure to the gate; and when he goes out they take off one of his boots, which is then placed over it in token of their approbation of his conduct. When Mr. Cottrell, the English traveller, was at that place in 1841, he saw but two boots over the gate. There is no ceremony now observed by the Russians and Chinese, as was formerly the case, on arriving at Kiakta or Maimatchin. Several of the Russian merchants engaged in the trade have accumulated large fortunes, and live in elegant style. The residence of M. Siberchoff, one of the wealthiest of the guild, is said to have cost $100,000. The merchants think the best hospitality they can offer to a stranger, is to press him to drink all the different kinds of tea in succession.

It may be assumed as a fact, that since the commencement of the present century the traffic between Russia and China, at Kiakta, has increased twelvefold. It is regarded as the most beneficial branch of Russian commerce; and besides the Imperial Russian-American Company, a considerable number of the principal merchants of Kiakta, Irkoutsk, and Moscow, have large capitals invested in the trade. Besides Kiakta, the Siberian frontier towns of Zurukaita, Semapalatinsk, Biisk, and Omsk, are considerable marts for trade with China and Central Asia. There are various roads going from Yarkund through Chinese Turkestan and the Kirghiz country, that serve as ways of transport by immense trading caravans from China to Orenburg, and other great marts of trade in Russia.

The Chinese government has, since the conclusion of the peace, very much relaxed its restrictive regulations respecting the Russian commerce. The prohibitory system, which had hitherto been maintained at the frontiers of Chinese Turkestan, and along the great wall, against the Chinese speculators, led occasionally to revolts, in suppressing which the Emperor was obliged to disburse large sums. There is moreover a desire to place the Russians under obligation to secure the loyalty of the Mongol tribes, by opening the road to gain, and to remove every possible occasion of col-

lision. The statement of an increase of commerce may, therefore, be considered as correct.

The commerce carried on in Kiakta is a mere barter trade. On tea, the principal commodity imported by the Russians, the greatest profits are realized; one account states that what was bought in 1839 at that mart for $7,000,000, realized $18,000,000 at the fair of Nishney-Novgorod.

In 1846, the Russian government sent M. Demetrius Wassingen, an attachée of the cabinet of Count Nesselrode, as special envoy to Pekin, for the purpose of negotiating a new secret commercial treaty with China. The Russians are desirous of establishing at Kiakta a considerable depot of merchandise, from which the Chinese may at all times draw the supplies they want. Late advices from the East intimate that the envoy had succeeded in concluding a treaty with the celestial government, securing to the Russians the free admission through that part of the frontier of all Russian merchandise, and moreover the monopoly of certain articles which we and the English are beginning to import, together with the privilege of the free navigation of the great Manchurian river, Amur.

Ever since the first disastrous treaty of 1689 between Russia and China, the Court of Pekin is accustomed to consider the Czars as princes subject to the Celestial Empire. Kang hi boasted of having humbled the Russians, and praised their submission when they refused to assist his enemy, the prince of the Eleuths. In the Chinese accounts of Russia, it is described as the country of Olozu, sending tribute to the celestial emperor by the way of Kiatou, and the Russian emperor is styled by them Tsakan-Khan, "the white king."

The countries in the four quarters of the world which send ambassadors and pay tribute to China, as described in a Chinese court document, are Corea, Loo-choo, Laos, Cochin-China, Siam, Sulu, Holland, Burmah, and those of the western ocean, Portugal, Italy, and England; all other countries have only intercourse and commerce.

Among the other nations mentioned are Japan, Acheen, France, and Sweden, which have not brought tribute; and the reason assigned why Mr. Cushing, our commissioner to China in 1844, should not proceed to Pekin, was because the United States had never sent tribute; the Chinese government artfully representing the presents brought by the various Asiatic and European embassies to Pekin, as tribute to the Celestial Empire.

The Emperor of Russia is devoting his gigantic energies to the promotion and encouragement of agriculture, mining, manufactures, internal trade, foreign commerce, and the development of the resources of the country, by opening new and direct routes of communication by land and water with every part of his European and Asiatic dominions.

By the system of railroads now in progress of construction in Russia, lines are to be extended from St. Petersburg to Moscow, Nishney-Novgorod, on the Wolga, and Casan, on the Casanca, near the Wolga, and another line which is to terminate at the Black sea. The Wolga, 2,500 miles in length, is already united with the Neva, connecting the Baltic and Caspian, and also the route to Siberia and China, all by means of the canal of Vishnei-Volotshok. Several further extensive improvements of the internal navigation by the rivers and canalization of the empire are in progress.

From Nishney-Novgorod steamers descend the Wolga to Casan and

Astrakan. In this latter city the Emperor has lately built several steamers for the purpose of plying on the Caspian, and keeping up commercial relations between Russia and Persia, Independent Tartary, and the provinces beyond the Caucasus; thus opening a direct line of communication by railroads and steamers between the principal states of Western and Eastern Europe and Western and Central Asia.

Next to Kiakta, the fair of *Irbet*, in the Asiatic district of the government of Perm, is the most important of all Asiatic Russia.

Nishney-Novgorod is situated at the junction of the Wolga with the Okha, and has a population of about 33,000. The celebrated fair commences the 1st of July, and lasts till the end of August, and is usually attended by more than 300,000 persons from the most distant parts of the empire, and Europe, Asia, Australia, and America. It is regulated by imperial decrees, and the places of sale and purchases of staple commodities have each their respective stations and bazaars, where the products, manufactures, goods, wares, and merchandises of almost every country on the globe, are to be found. The assemblages of people of all tongues and costumes is more varied at this fair than at any other, consisting of Chinese, Calmucks, Bashkirs, Mongols, Manchus, Bokhars, Indians, Kirghizes, Persians, Georgians, Circassians, Armenians, Parsees, Arabs, Greeks, Jews, Slavonians, Germans, Italians, English, Dutch, Belgians, Danes, Swedes, Americans, Australians, &c. The trade is as various as the crowd is motley, consisting of an endless catalogue of all that is requisite to supply the natural and artificial wants of mankind. The transactions are immense; the aggregate commercial movements of the fair of 1842, amounted to about 38,500,000 silver roubles.

Note on the tea plant, from "Fortune's Wanderings in China."

"There are few subjects connected with the vegetable kingdom which have attracted such a large share of public notice as the tea plant of China. Its cultivation on the Chinese hills, the particular species or variety which produces the black and green teas of commerce, and the method of preparing the leaves, have always been objects of peculiar interest. The jealousy of the Chinese government in former times, prevented foreigners from visiting any of the districts where tea is cultivated; and the information derived from the Chinese merchants, even scanty as it was, was not to be depended upon. And hence we find our English authors contradicting each other; some asserting that the black and green teas are produced by the same variety, and that the difference in color is the result of a different mode of preparation; while others say that the black teas are produced from the plant called by botanists *Thea Bohea*, and the green from *Thea viridis*, both of which we have had for many years in our gardens in England. During my travels in China since the last war, I have had frequent opportunities of inspecting some extensive tea districts in the black and green tea countries of Canton, Fokien, and Chekiang: the result of these observations is now laid before the reader. It will prove that even those who have had the best means of judging have been deceived, and that the greater part of the black and green teas which are brought yearly from China to Europe and America are obtained from the same species or variety, namely, from the *Thea viridis*. Dried specimens of this plant were prepared in the districts I have named, by myself, and

are now in the herbarium of the Horticultural Society of London, so that there can be no longer any doubt upon the subject. In various parts of the Canton provinces where I have had an opportunity of seeing tea cultivated, the species proved to be the *Thea Bohea*, or what is commonly called the black tea plant. In the green tea districts of the north—I allude more particularly to the province of Chekiang—I never met with a single plant of this species, which is so common in the fields and gardens near Canton. All the plants in the green tea country near Ningpo, on the islands of the Chusan Archipelago, and in every part of the province which I have had an opportunity of visiting, proved, without exception, to be the *Thea viridis*. Two hundred miles further to the northwest, in the province of Kiang-nan, and only a short distance from the tea hills in that quarter, I also found in gardens this same species of tea. Thus far my actual observations exactly verified the opinions I had formed on the subject before I left England, viz: that the black teas were prepared from the *Thea Bohea*, and the green from *Thea viridis*. When I left the north, on my way to the city of Foo-chow-foo, on the river Min, in the province of Fokien, I had no doubt that I should find the tea hills there covered with the other species, *Thea Bohea*, from which we generally suppose the black teas are made; and this was the more likely to be the case as this species actually derives its specific name from the Bohea hills in this province. Great was my surprise to find all the plants on the tea hills near Foo-chow exactly the same as those in the green tea districts of the north. Here were, then, green tea plantations on the black tea hills, and not a single plant of the *Thea Bohea* to be seen. Moreover, at the time of my visit, the natives were busily employed in the manufacture of black teas. Although the specific differences of the tea plant were well known to me, I was so much surprised, and I may add amused, at this discovery, that I procured a set of specimens for the herbarium, and also dug up a living plant, which I took northward to Chekiang. On comparing it with those which grow on the green tea hills, no difference whatever was observed. It appears, therefore, that the black and green teas of the northern districts of China (those districts in which the greater part of the teas for the foreign markets are made) are both produced from the same variety, and that that variety is the *Thea viridis*, or what is commonly called the green tea plant. On the other hand, those black and green teas which are manufactured in considerable quantities in the vicinity of Canton, are obtained from the *Thea Bohea*, or black tea. * * * * *

"In the green tea districts of Chekiang, near Ningpo, the first crop of leaves is generally gathered about the middle of April. This consists of the young leaf buds just as they begin to unfold, and forms a fine and delicate kind of young hyson, which is held in high estimation by the natives, and is generally sent about in small quantities as presents to their friends. It is a scarce and expensive article, and the picking off the leaves in such a young state does considerable injury to the tea plantation. The summer rains, however, which fall copiously about this season, moisten the earth and air; and if the plants are young and vigorous, they soon push out fresh leaves. In a fortnight or three weeks from the time of the first picking, the shrubs are again covered with fresh leaves, and are ready for the second gathering, which is the most important of the season. The third and last gathering, which takes place as soon as new leaves are formed, produces a very inferior kind of tea, which is rarely sent out of

the district. The mode of gathering and preparing the leaves of the tea plant is very simple. We have been so long accustomed to magnify and mystify everything relating to the Chinese, that, in all their arts and manufactures, we expect to find some peculiar practice, when the fact is, that many operations in China are more simple in their character than in most other parts of the world. To rightly understand the process of rolling and drying the leaves, which I am about to describe, it must be borne in mind that the grand object is to expel the moisture, and at the same time to retain as much as possible of the aromatic and other desirable secretions of the species. The system adopted to attain this end is as simple as it is efficacious. In the harvest seasons, the natives are seen in little family groups on the side of every hill, when the weather is dry, engaged in gathering the tea leaves. They do not seem so particular as I imagined they would have been in this operation, but strip the leaves off rapidly and promiscuously, and throw them all into round baskets, made for the purpose out of split bamboo or ratan. In the beginning of May, when the principal gathering takes place, the young seed-vessels are about as large as peas. These are also stripped off and mixed with the leaves; it is these seed-vessels which we often see in our tea, and which has some slight resemblance to young capers. When a sufficient quantity of leaves are gathered, they are carried home to the cottage or barn, where the operation of drying is performed."

This is minutely described, and the author continues:

"I have stated that the plants grown in the district of Chekiang produce green teas, but it must not be supposed that they are the green teas which are exported to England. The leaf has a much more natural color, and has little or none of what we call the 'beautiful bloom' upon it, which is so much admired in Europe and America. There is now no doubt that all these 'blooming' green teas which are manufactured at Canton are dyed with Prussian blue and gypsum, to suit the taste of the foreign 'barbarians;' indeed, the process may be seen any day, during the season, by those who give themselves the trouble to seek after it. It is very likely that the same ingredients are also used in dying the northern green teas for the foreign market; of this, however, I am not quite certain. There is a vegetable dye obtained from *Isatis indigotica* much used in the northern districts, and called *Teinsing;* and it is not unlikely that it may be the substance which is employed. The Chinese never use these dyed teas themselves, and I certainly think their taste in this respect is more correct than ours. It is not to be supposed that the dye used can produce any very bad effects upon the consumer, for, had this been the case, it would have been discovered before now; but if entirely harmless or inert, its being so must be ascribed to the very small quantity which is employed in the manufacture."

In short, the black and green teas which are generally exported to England and the United States from the northern provinces of China, are made from the same species; and the difference of color, flavor, &c., is solely the result of the different modes of preparation.

3. Manchuria and the river Amur.

Manchuria, or Eastern Chinese Tartary, occupies the vast region subject to China, lying north of Corea to Siberia, from which it is separated by the chain of the Daourian or Yablonoi Krebei, or "Crab-apple mountains," so called by the Russians from their abounding in a tree bearing a small fruit resembling the *crab apple*. As they approach the Pacific they take the name of the Stannovoi mountains, and extend northeast of Okotsk to Behring's straits. It is bounded on the west from Mongolia by the mountain range of King Khan-Oola; on the east by the sea of Okotsk, gulf of Tartary, and sea of Japan; on the south by the great wall, barrier of stakes, gulf of Leao-tong, and Yellow sea. Its greatest extent from north to south is about 700 miles, and from east to west about 900 miles, and is situated between 40° and 55° north latitude, and 118° 30′ and 140° east longitude. Population estimated at about 2,000,000.

The territory is divided into three great provinces, viz: to the south, Shing King, or Moukden, the ancient Leao tong; in the centre, Kirin-Oola, and the North Kihlung-Keeang, or Tsitsikar. The first of these borders on China, Mongolia, and the gulf of Leao-tong; the second on Corea, the sea of Japan, and gulf of Tartary; and the third on Siberia and Mongolia.

The government of the provinces consists of a supreme government at Moukden, the capital, and three provincial governments. That of Moukden is the same as is in China proper, while that of the other provinces is wholly military. The province of Moukden includes two departments, that of Fungteen-foo, the metropolitan department, and the Hing-King, or King-chow-foo. These are subdivided into Chow and Heen districts, as in China. The city of Moukden is not under a cheefoo, but one of higher rank, called foo yuen, who co-operates with one of the boards in the government of the metropolitan department. His assistant has the direction of the literary branch of the administration. The three provinces are under the government of a general, who is always a Manchu. His subordinate officers are lieutenant-generals, at the head of each principal division of the province. Subordinate to these are garrison officers, of rank varying according to the importance of the districts under them; these delegate their authority to officers or assistant directors. The frontiers are under a separate class of officers.

The Manchus are divided into eight orders, or distinct classes, which has each a separate colored flag or banner. They belong to the great race called Tungouses by the Russians, and Tartars and Oeven in their own language. *Moukden* is the capital and residence of the supreme, civil, and military provincial government; that of the other provinces is wholly military.

The western part of Manchuria is in general a flat country; the immense plains of Mongolia terminate there. This region, and the southern part, called Shing-King, are well cultivated, for the Manchus are an agricultural people, and not nomads like the Monguls; and it is in course of rapid settlement by agricultural emigrants from the Chinese province of Shantung.

The land is fertile and produces wheat, *mai-se-mi*, (a grain peculiar to the country, between wheat and rice,) rice, millet, oats, leguminous plants,

hemp, tobacco, and cotton. The land cultivated by the first Russian settlers on the Albasyne, an affluent of the Amur, in 1648, still produces grains growing spontaneously from the seed, which falls annually from the ears. Immense herds of oxen and flocks of sheep are seen feeding in the valleys. The summers are short, but very hot; the greater part of the fruit trees of Europe, and even tropical productions, are found here. Among the mineral products are copper, iron, agate, and jasper. Valuable pearls are found in several of the rivers and lakes, and in the gulf of Tartary. In Leao-tong there is a species of native oak, upon the leaves of which wild silk-worms feed, and its product forms one of the principal branches of industry in the province.

In the centre, which is generally mountainous, Manchuria is covered with vast primitive forests, abounding with tigers, bears, deer, reindeer, black foxes, ermines, sables, martins, and other wild animals; eagles, vultures, pheasants, and a great variety of birds; they also produce rhubarb and the real ginseng, so highly valued by the Chinese for its supposed strengthening and aphrodisiac qualities, and which the Emperor sells to his subjects for its weight in gold. In the autumn of every year there is a general hunt by a large body of imperial huntsmen, for game, furs, peltries, rhubarb, and ginseng, which are government monopolies. Notwithstanding the severest prohibitions, great numbers of Chinese, Manchus, Coreans, and natives, hunt these forests for their own advantage.

The Emperor Kien-lung, in his description of Manchuria, says: "You find a succession of hills and valleys, parched lands and well-irrigated territories, majestic rivers, impetuous torrents, graceful streams, smiling plains, and forests impenetrable to the rays of the sun. The Iron mountain and the Ornamented mountain are seen in the distance. On the latter is found a lake which never increases or diminishes. Among the trees of the country are the fir, cypress, accacia, willow, apricot, peach, and mulberry. Wheat yelds a return of an hundred fold. Ginseng grows in all the mountains; its name signifies the "queen of plants." It would make man immortal, if he were capable of becoming so. Leao-tong exports large quantities of wheat, peas, rice, and rheubarb."

The rivers of the north, particularly the Amur, and its tributaries the Songari and Osouri, swarm with beavers, otters, sturgeon, the belouga, salmon, trout, pike, carbel, shad, and a variety of other fish. The belouga, (*sturio huso*) or "white fish," is the largest fresh-water fish that is eatable; it is generally 15 to 25 feet in length, and also abounds in the rivers that fall into the Caspian and Baltic. The flesh is very white, tender, and much esteemed by the Russians. It is eaten fresh, salted, and smoked. Caviar is made from the roe, and isinglass from the intestines.

This river is called Amur, or Tamur, "Great river," by the Guiliacks, living on its banks near its embouchure; by the Manchus, Saghalien-Oola, "river of Black Water;" by the Chinese, He-long-kiang, "river of the Black Dragon;" by the Mongols, Kara-muran, "Black river;" and by the Russians, Yamur. It carries off nearly all the waters of the slopes and the mountains in which the great Asiatic desert, Gobi, or Shamo, terminates towards the east. In its course it forms the boundary between Mongolia and the Siberian district of Nerthshink; passes through lake Kalun, or Dalai-Nor—about 210 miles in circumference—receives a great number of navigable rivers, and after a winding course of more than 2,280 miles, discharges its waters into the gulf of Saghalien. It is rapid

and deep; nine miles wide at its mouth; and is stated by the Jesuit Gerbillon, who explored it by order of the Emperor Kang-hi, to be navigable 500 leagues, as far as Niptchu. The gulf is united with the north Pacific by a strait, which in the narrowest part is about five miles wide, with 20 to 25 feet water on the bar at its entrance. On the southern banks of the river are some small towns, penal settlements of the Chinese.

The Amur is the most valuable river in Northern Asia; the only highway of nature that directly connects the central steppes of Asia with the rest of the world. The extent of the rivers which disembogue at its mouth, is amazing; the principal towns of Manchuria, and several places in Mongolia, are accessible by them; they extend to upwards of thirty degrees of longitude. By its position with respect to the sea of Japan, a settlement at or near its embouchure would open a new and most profitable trade with Manchuria, Central Asia, Siberia, the Japanese islands, Corea, &c.

There appear to be no insurmountable obtacles to a direct communication being opened between the Pacific and Baltic, and with the Caspian and Black seas, by the route of this river and the navigable waters of Siberia. The Amur is navigable from the Pacific to its junction with its upper affluents, the Argun and Chilka. From the Chilka to the Selengá, Mr. Cottrell, a late English traveller in Siberia, states there is a constant succession of navigable rivers, with occasional rapids and shallows—in all, perhaps, 20 miles—which might easily be got rid of at no very heavy expense. A road would be required to be made across the Yablonoï mountains, which at this point are not very elevated. The vicinity abounds with fine forests of oak, and other woods fit for building vessels; and iron and cordage are the products of the country. The Selengá falls into the Baïkal lake, from which the magnificent Angará takes its rise. The only cataracts almost in any Siberian river are found in it between Irkoutsk and Yénéseisk, but these are even now easily passed. At the town of Yéneseisk, a second land journey of 60 miles must be made as far as the town of Makofsk, on the Ket, which, although a winding river, is navigable to the point where it falls into the Oby. By means of this, the deepest and broadest of all Siberian rivers, and the Irtysch, no impediment would occur as far as Tobolsk, from whence the Tobole, Tura, and Nitsa communicate with the great depots of salt at Krasnoslobodsk. Here would be the third and last difficulty; a line of communication with the river Tchurovaia, to the west of the Ural, 186 miles. This river falls into the Kama, and that into the Wolga, from which there are now three different communications by water with St. Petersburg, the gulf of Finland, and the Baltic. So that there appear to be but 266 miles between the North Pacific and Baltic, where a canal and roads are necessary to complete the communication. The Wolga is already connected with the Caspian and Black seas by a system of canals and navigable rivers, completed in 1803. Russia also communicates with Persia and Turkestan, from Astakan, on the Caspian; and from the Black sea with Turkey, Asia Minor, Circassia, and Georgia.

The Songari is a deep and navigable stream, the largest tributary of the Amur, into which it enters in latitude 48° N., and is considered by the Manchus and Chinese as the principal river. It has its source in the "Long White mountain," called by the former Golmin-chan-yan-alin, and by the latter Shan-pe-shan, on account of its white appearance, the

summit being covered with snow in winter, and white mists in summer. This mountain extends along the northern coast of the Yellow sea, and forms the northern boundary of Corea and Manchuria. It has become famous in China as the birth-place of Aïgen Kioro, or "Golden Kioro," the founder of the present imperial Manchu dynasty, whose ancient dwelling, on the eastern slope of the mountain, has been preserved with religious care. It is regarded with superstitious veneration by the Manchus and Chinese, and annually visited by crowds of pilgrims from the remotest parts of the empire, to offer sacrifices and burn incense at its shrine.

The Ousouri rises east of the Songari, and after receiving a considerable number of large streams, falls into the Amur in latitude 49°. It is remarkable for the purity and transparency of its waters, and the variety and excellence of its fish.

The nomad tribe, called by the Chinese Yu-pe-tahtsi, "people dressed in fish-skins," inhabit the banks of the Songari, Ousouri, and their tributaries. They follow fishing and hunting, and sell to the Chinese their furs and fish. The trade is carried on in winter; the fish, which is then frozen, supplies the markets at more than 500 miles distance. They receive in exchange cottons, rice, and brandy extracted from millet. They have a language of their own. Their States are independent of the Emperor of China, and they do not allow any strangers upon their territory. To the southward of the Yu-pe-tahtsi, on the coast, near the frontier of Corea, lies a country called Ta-Tchoo-Soo, a kind of border land, whither resort a crowd of Chinese and Corean vagabonds; some driven by the spirit of independence, others to escape from the punishment due to their misdeeds. They have chosen a chief, and form a community of outlaws.

A considerable tract of country north of the Amur, in Manchuria and Siberia, on the gulf of Okotsk, and on the coast, to the westward of its mouth, is occupied by nomad tribes of Guiliacks, of the Tungousen, and Poukeys, Manchapotonos, and Katchells, of the Aïnos races, that subsist by hunting and fishing, and come annually, at a fixed period, to trade with the Manchus, at a small town near the mouth of the river called Tsetalcho, and exchange their furs, peltries, and dried fish, for cotton cloth, tea, flour, grain, tobacco, &c. They pay no tribute either to the Chinese or Russian governments, and do not allow the Manchus and Chinese to come amongst them. The Guiliacks are said to use tamed bears for draught, like the dogs and reindeer among the Samoyedes and Kamtschatkadales.

According to Professor Von Middendorf, who explored the country on a scientific tour in 1844, these tribes belong to different races; one Kurilian or Mongolian, and the other Caucasian. He spent four months amongst them, studied with interest their manners, customs, and the developments of their industry, and compiled copious vocabularies of their languages. A resumé of the scientific results of the professor's travels is published in the Bulletin of the Imperial Academy of Sciences of St. Petersburg, vol. 4, 1845.

The Lea-ho rises in the King-kan mountains, and after a winding course of about 500 miles, falls into the gulf of Leao-tong. The Yalu has its sources in the Golmin-chan-yan-alin, and falls into the Yellow sea. There are several other smaller rivers that discharge their waters into the same sea and the gulf of Tartary.

Salmon and herring are said, by La Peyrouse, to be nowhere so abu-

dant as on the east coast of Manchuria; cod also are found, but not taken in such quantities. Whales are numerous, and seals, and fur-seals, sea-lions, and sea otters, are very frequent. The gulf of Tartary, which separates the island of Tarakay from the continent, is about 200 miles wide at its most southern extremity; but it grows narrower as we advance further north, until near 52°, where the island is connected with the main land by a sand bank, or low, narrow neck of land, without any navigable communication between the gulf of Saghalien and Tartary. The narrowest part of the gulf is called by the Japanese Mamia no Sseto, or "strait of Mamia."

The east coast of Manchuria is generally high and rocky. Castrie's bay, in 51° 29′, near the northern extremity of the gulf of Tartary, was visited by La Peyrouse during the summer season, and he represents it to be one of the best harbors on the coast, with good anchorage in five to twelve fathoms. He found the climate delightful and the country fertile, reminding him of that beautiful France, to which he was never destined to return. The forests were filled with fur animals and game; fine streams of water fell into the bay, which swarmed with salmon and a great variety of fish. He also visited and named Ternay bay, in 45° 13′, and Suffren bay, in 47° 51′, on the same coast, both possessing good harbors.

In 1643, when the Manchus were engaged in the conquest of China, an armed band of Russian Promuschlenicks, or fur hunters, under the command of the Cossack Poyarkov, allured by the hope of finding rich silver mines, and abundance of fur animals, which were reported to exist in Manchuria, crossed the Yablonoï mountains from Siberia, and descended the Tchirkiri-oola, a tributary of the Amur, to its junction with that river, which they explored to its embouchure in the gulf of Saghalien. They did not, however, succeed in the discovery of any mines of the precious metals, but found the forests filled with a great variety of fur animals, and they collected a valuable *yassak*,* or tribute of furs from the natives.

The successful enterprise of these fur-trading adventurers encouraged another company of Promuschleniks, from the Siberian frontier town of Nertschinsk, to descend the Amur, in 1648, on which they erected a line of stockades, at Yaska and Kamarski-ostrog, and built and fortified the town of Albasyne, on the river Albasyne, near its junction with the Amur, and remained in possession of the country.

These successive incursions and military occupation of northern Manchuria by the Russian fur traders, involved them in frequent hostilities with the Chinese, which were not terminated until 1689, when they were compelled to surrender their settlements to a large military force which was sent by the Emperor Kang-hi, accompanied by two Jesuits, Gerbillon and Parennin, as his envoys, to recover possession of the country. A treaty was concluded at Nertschinsk on the 7th September, in the same year, between Russia and China, making the rivers Kerbechi and Argun, which fall into the Amur, and the long chain of mountains extending below their sources to the Pacific ocean, the boundaries between the two empires; but without defining the boundary of the country lying between

*The word "yassak" is used in Siberia, Persia, and India, to denote the tribute levied in those countries upon tribes who do not profess the dominant religion. It comes from the ancient Turkish and Tartar languages, and signifies "the law."

these mountains and the river Ud, in Siberia. The former was granted permission to send a caravan of merchandise every year to Pekin; and also, for a certain number of Russians to reside there. The Russian settlements on the Amur, and its tributary rivers, were broken up, and the survivors sent to Pekin, where some of their descendants still remain, and have preserved their religion.

The vexed question of boundary caused frequent disputes between the courts of Pekin and St. Petersburg, which were not finally adjusted until the treaty of 14th June, 1728. By this definitive treaty, the extensive line of demarcation separating the two greatest empires of the world commences, at the west, in Mongolia, on the river Bukturima, an affluent of the Irtysch, and terminates at the sea of Okotsk, on the east. It is 3,000 miles in length in all its windings, 10 to 30 yards wide, and was traced and surveyed by the joint commission of the Russian and Chinese plenipotentiaries, and 87 boundary monuments were erected theron, at certain distances, bearing inscriptions in Chinese, Mongolian, Manchu, and Russian.

By the 5th article of the treaty, a Russian mission or college, composed of six priests and four laymen, was established at Pekin, for teaching the above languages. A chapel was built, by the aid of the Chinese, for the celebration of the ritual of the Greek church; and the mission is changed every ten years. Kiakta and Maimatchin, and the small Siberian town of Zurukaitu, on the river Argun, were made entrepôts of the Russian trade with China.

Difficulties having subsequently arisen between the two governments, occasioned principally by marauding parties and the escape of criminals across the frontier, a new convention was concluded 18th October, 1768, between the plenipotentiaries of Kieng-lung and Catharine II, for the reciprocal extradition of fugitives from either country, and the establishment of a line of military posts to guard the frontier. In 1785 the commercial relations between Kiakta and Maimatchin were interrupted by the depredations on the frontiers, and not resumed until 1792, when the treaty of 1728 was renewed, and the commercial intercourse has been carried on ever since with remarkable perseverance and success.

Hoong-tchoong, a seaport on the Yellow sea, near the frontier of Corea, is famous through the country for a branch trade which is extended through the whole empire; this is the *Hay-chay*, a marine plant which is taken in immense quantities on the sea of Japan, a short distance from the shore. A fair is held at this place every two years, which is frequented by great numbers of Chinese for the purpose of traffic with the Coreans. They bring dogs, cats, pipes, leather, stags'-horns, copper, horses, mules, and asses; and receive in exchange, baskets, kitchen furniture, rice, corn, swine, paper, mats, oxen, furs, and small horses highly prized for their speed. The exchange of merchandise is made at Kee-eu-wen, the nearest town to Corea, at the distance of 20 miles from Hoong-tchoong. There exists a very strong hatred between the two nations, in consequence of the Chinese having many years since entered the peninsula of Corea and carried off numbers of women and children.

A considerable trade is carried on with China, by land and sea, from the port of *Kin-chow*, about 45 miles from Moukden; and also with Corea by land, and through the islands of the Potocki Archipelago, dependencies of the town of Ning-hai-hian, lying off the east coast of Leao-

tong, which is called by the English "Prince Regent's Sword." The maritime trade with China, according to Gutzlaff, is principally conducted by Fokien traders, employs upwards of 1,000 junks, and is of the average annual value of 7,000,000 tales. (A tale = $1 54.)

Kirin, the metropolis of the province of the same name, is the principal mart of trade in Manchuria. It is situated on the western bank of the river Songari, which in that part is called Kirin oola, whence it takes its name, for Kirin-oola-hotun signifies "city of the river Kirin." A chain of mountains, from west to east, shelters it against the cold winds of the north. Like most Chinese cities, it contains nothing remarkable; it is an irregular collection of cabins, built of brick or clay, covered with straw, with only a ground floor. It is inhabited by Manchus and Chinese, and contains, according to the statement of a Catholic missionary in 1845, about 150,000 inhabitants. Kirin is a place of great commercial activity; possesses warehouses for furs and peltries of every kind, cotton cloths, silks, artificial flowers, with which the women of every class deck their heads; and depots of timber for building, which is brought from the extensive imperial forests in the district.

In this district is a small lake, about 20 miles in breadth, celebrated throughout the country for the quantity of pearls which are fished in it for the Emperor of China. They call it Hay-choo, or Hing-choo-men, "black lake," or "the precious stone gate." There are also several other lakes in Manchuria.

The Chinese and Manchu officers and soldiers stationed in Tsitsikar, and the fortified towns of Meyhen-hotun, Nicurgi-hotun, and Saghalien-oola-hotun, in this district, have grown very rich and powerful, and carry on a very profitable commerce with China, whilst the natives are, for the most part, kept in a state of slavery and subjection under them.

The Chinese and Manchus, although inhabiting for the last two centuries within the same enclosed ramparts, and speaking the same language, have not amalgamated; each possesses its genealogy apart. Thus, at meeting in an inn when travelling, or addressing a stranger, nothing is more common than this question: "Neshee-ming-jeu, Khee-jeu?" "Are you Chinese, or Manchu?" They distinguish the former by the dynasty of the *Ming*, and that of the latter by the name of *Banner*, each Manchu rallying under his own proper standard or banner. They generally profess the religion of Budha.

On the public roads communicating with the principal towns, there are inns at stated distances for the refreshment of travellers, kept by Chinese, called Hoang-koong-tzay, "people without family," who are employed in hunting and searching for ginseng.

The military town of *Petounē-hotun* is situated on the Songari, about 130 miles north of Kirin. It is a place of little note, principally inhabited by exiles from China.

Ningouta-hotun lies on the river Houka-pira, which falls into the Songari. It is regarded as the ancient patrimony of the reigning Emperor of China. The name Ningouta signifies "seven chiefs," from the seven brothers of one of his ancestors, who, after uniting their families, built this town, and extended their authority over the country eastward to the Amur. It is the residence of a general commanding the district.

Ching-yang-foo, or *Moukden*, the seat of the territorial government or principality of Manchuria, and the headquarters of the military governor

of the province, is built on an eminence. A number of rivers add much to the fertility of the surrounding country. It may be considered as a double city, one of which is enclosed within the other. The Manchus have been at great pains to ornament it with several public edifices, and to provide it with magazines of arms and storehouses. About 4,000 troops are usually stationed here. It is distinguished for its academy of learned men, and as the old capital of the Manchu empire, which was founded in 1618 by Abkaï Foulinga, whose Chinese title of honor in the hall of his ancestors was Khien-ming, "favored of Heaven."

The Emperor Kien-lung, like his illustrious European contemporary, Frederick the Great, was equally distinguished as a scholar and poet. Among his literary productions a Chinese "Ode on Tea," and a Manchu poem in "Praise of Moukden," are the most celebrated. In the latter the Emperor commemorates the mythic origin of his race and kingdom to "a celestial virgin, youngest daughter of Heaven, who abode in ancient times on the summit of the Long White mountain, by lake Timoun, from whence descend the rivers Yalou, Khountung and Aikhon, that water and fertilize the plains through which they flow. This goddess having partaken of a red fruit of most enticing appearance, conceived and brought forth a holy son, on whom Heaven bestowed the name of Kioro, and by way of pre-eminence, Aïgen, 'golden,' or 'golden Kioro.' When by great and unceasing efforts he had succeeded in the purification and renovation of his kingdom, he acquired the countries of Yekhé, Khouïfa, Dchaïfian, and Fousi. He afterwards founded a city in the country of Liao-yang, which became the capital of the kingdom of the East. The happiness he enjoyed by Divine favor having increased, and his desires expanding, in the tenth year of the 'Providence of Heaven,' being fearful of danger, he established his dominion in the centre. He prospered in the country of Ching-yang, on which good fortune had lavished its choicest favors, and there built the city of Moukden, which closed and defended the passes to the countries of the west." This Aïgen Kioro is considered by the present dynasty in China not only their first ancestor, but the founder of the nation. The reigning imperial family also take the surnames of Poulkouri and Yongchon, which had been adopted by their ancestor, Aïgen Kioro.

Hingching, 60 miles east of Moukden, in the same province, is the family residence of the Manchu monarchs and the burial ground of their ancestors. It is pleasantly situated in a mountain valley, and the tombs are upon a mountain three miles north of it. The town is situated near the palisade which separates the province from Kirin, and its officers have the rule over the surrounding country, and the entrances into that province; a large garrison is maintained there, which, with the salubrity of the air, has attracted a considerable population.

The Manchus are stouter and of a lighter complexion than the Chinese; they have the same conformation of the eyelids, but rather more beard, and their countenances present greater intellectual capacity. They seem to partake of both the Mongol and Chinese character, possessing more determination and largeness of plan than the latter, with much of the rudeness and haughtiness of the former. Barrow states that those of the Manchus whom he saw at Pekin had fair and florid complexions; a few had blue eyes, straight or aquiline noses, brown hair and heavy

beards; the Emperor, Kienlung, himself had some of these characteristics. Mr. Williams, in "The Middle Kingdom," regards them as "the most improvable race in Central Asia, if not on the continent; and the skill with which they have governed the Chinese empire, and the improvement which they have made in their own condition, during the same time, give promise of still further advances when they become familiar with the civilization of Christian lands."

The languages of all the tribes of the Tungousan race have a great similarity in words and construction; and it appears there is a relationship between them and the languages of the Mongols and Turks, as well as some languages of Eastern Europe, especially that of the Finlanders.

The Manchu language has an alphabet of 28 primitive or radical letters, each with two or three variations, forming, according to the "Alphabet Mantchou" of L. Langles, a syllabary of about 1,400 groups. The character is identical with the Mongolian, and both are supposed to be derived from the Oïgourian of the Oïgoors, whose letters were the same with, or merely variations of, those called Tangoutan, and were first introduced among the Mongols during the reign of Jenghis-Khan. It is written in columns, from the top of the page downwards, like the Chinese, with which, however, neither it nor the language bears any affinity or resemblance.

Although the Manchus have but one kind of character, there are four different ways of writing it: the first is when they write with respect, in addressing the Emperor, or high officers of his court; it is larger than the ordinary character, and written with the greatest precision and elegance. The second is less elaborate. The third is the ordinary running hand in general use. These three modes of writing are equally legible, but not equally beautiful. The fourth is a more concise and abbreviated character for minutes and extracts.

What is most singular in this language is, that the verbs are changed as often as the substantives governed by the verb are different; as, for instance, the verb *to make* must be changed as often as the substantive that follows it; we say "to make verses," "make a noise," "make" a statue, table, chair, clock, &c. Such modes of expression are not permitted by them; if they make use of the verb in familiar conversation, it is pardonable, but they never suffer it in composition, not even in their ordinary writings. They cannot bear the repetition of the same word in two consecutive lines, and never use pronouns, having little occasion for them; the arrangement of their words alone supplies this deficiency, without leaving any obscurity or ambiguity.

The language is remarkable for the great number of expressions it furnishes for the abbreviation of discourse, and to express the nature, qualities, properties, and attributes of persons and objects, animate and inanimate. Very short words convey, with the greatest precision and perspicuity, ideas which, without their assistance, could not be expressed but by very long phrases. This is particularly observable when they speak of animals, whether domestic or wild, aquatic or volatile, which could only be exactly described by circumlocution in the languages of western nations. As, for example, the dog: besides the common names of every species of dog, they have words which denote the age, color, particular marks, skin, hair, height, figure, size, speed, good and bad qualities, &c. The same of a horse, an animal so useful to them, and for which they

have a great predilection, they have invented terms still more multiplied than the dog; as, for example, "being tied up, he cannot stand still;" "fond of company;" "frightened at the fall of his rider;" "suddenly encountering a wild beast;" "with a rider on his back;" his action, pace, speed; "how many different shakes he gives his rider;" &c.: for these, and a great many other locutions, they have a single, appropriate word, to express. It is much easier to acquire than the Chinese, and is likewise the court language at Pekin.

They have no national literature; most of the books published in the language are translations from Chinese, made under the superintendence of the imperial academies of Pekin and Moukden. The illustrious and learned Kang-hi, one of the ablest sovereigns that ever sat on the throne of China, compiled a dictionary under the title of "Mirror of the Manchu Language," and translated into his vernacular idiom the history of China, and the classic books of Confucius, which he published in 1708. In his dictionary the words are distributed into several classes. The first treats of the heavens; the second, of time; the third, of the earth; the fourth, of the emperor, government, ceremonies, customs, music, books, war, hunting, man, drinking, eating, silks, cloth, dress, labor, workmen, instruments, barks, corn, herbs, birds, animals, wild and domestic, fishes, reptiles, &c. Each of these classes is divided into chapters and articles; all the words are written in capitals, and under each are found, in smaller characters, the definition, explanation, and usual meaning of the word.

These works were revised, augmented, and republished by his grandson, Kien-lung, in 1772. All Manchu candidates for office are compelled to study both languages, and must submit to rigid examinations in both, before they can be promoted.

The study of Manchu is cultivated in Russia. At St. Petersburg and Cazan, various works in the language, including grammars and dictionaries, have been published within a few years past. At the university of Cazan there are professorships of Manchu, and the principal oriental languages. The "Bibliotheque Royale" of Paris contains a large collection of Manchu books and manuscripts. The acquisition of the language is greatly facilitated by the "Alphabet Mantchou," above mentioned, in 8vo., and the "Dictionnaire Manchou-Français," in 3 vols., 4to., by M. Amyot, in which the words are arranged and classified according to the plan of the "Mirror of the Manchu Language;" and the "Dictionnaire Mandchou-Français," by Klaproth.

The latest information we possess respecting Manchuria is derived from the report of the Rt. Rev. Dr. Ferréol, vicar apostolic of Corea and the Loo-choo islands. to his superiors, published in the "Annales de la Propagation de la Foi," for May, 1846.

4. Island of Tarakay, or Saghalien.

Tarakay is usually represented on the maps and described in geographical works as Saghalien. By the aboriginal inhabitants, the Ainos, it is called Sandan; by the Manchus, Saghalien-anga-hata, "the island of the mouth of the Black river," because it is opposite the mouth of the Amur; and by the Japanese Oku yeso, "further Yeso," Tchoka, Chish, and Karafouto. The Chinese call the natives Olunchun, Kooyeh and Feyak.

In "Grosier's General Description of China," it is called Saghalien-Oola; and he states that the only knowledge the Chinese had of it was derived from the Katchell tribes inhabiting the banks of the Amur, near its mouth. In his map of China, Chinese Tartary, and the countries conquered by China, Tarakay is described as Saghalien oola-hata, "island of the Black river," belonging to Russia.

This island is situated in the northern Pacific, and extends from south of 46° to 54° 20′ north latitude, and between 142° and 145° east longitude, along the eastern coast of Manchuria, with which it is connected near 51° 30′ by a sand-bank or low narrow neck of land separating the gulf of Tartary from the gulf of Saghalien. The latter is a circular basin 50 miles wide, which receives the waters of the river Amur, and is called by Kruzenstern the Liman of the Amur, having its outlet in the sea of Okotsk by a channel about five miles wide, near the north part of the island. On the southern extremity it is divided from the Japanese island of Yeso by the strait of La Peyrouse, about 18 miles wide, and in which the tide runs with great velocity. It is nearly 600 miles in length, and varies in breadth from 25 to 120 miles.

In 1643 two Dutch vessels, the ship Kastirkon, commanded by Martin Gertin Devries, and the yacht Breskins, under the command of Hendrick Cornelius Schaep, were sent by Anthony Von Dieman, governor general of Batavia, to explore the northern seas of Japan, and were the first European navigators that visited the island. They supposed it to be part of the continent of Asia, and described it as the land of *Eso* or *Yeso*, the name originally given to all the islands lying between Kamtschatka and Japan, and they called the Kurile islands *Company's land*, (Urup.) They discovered and named Aniwa bay and Patience bay; the natives were friendly and hospitable; exchanged their furs, fish, oil, &c., with the Japanese for cloth, trinkets, &c., wore valuable silver ornaments, and informed them there were several mines of that metal in the country.

By the Japanese and Chinese accounts it would appear they have a very imperfect knowledge of the island, which does not form a part or dependency either of Japan or China. Rensifée Sendaï, one of the most eminent Japanese geographers, gives a brief description of the island in his *San-kokf-tsou-ran-to-sets*, or "General Outlines of the Three Kingdoms," published at Yedo in 1786, with an introduction written by Katsouri-Gava, court physician, commending the work to the favorable notice of the Siogoon. The author states in his preface that he resided several years in the island of Yeso, where he drew a map of that and the adjacent islands and countries, which agrees in the most essential particulars with those that had been previously published by his countrymen, Faksikf and Kanefori. In his description of the island of Yeso he gives the following account of Tarákay:

"To the north of Yeso there is another country separated from its northwestern point by a strait 6 to 7 ri* wide, called the island of Karafouto, or Karafto, but its true name is Taraïkaï, or Tarakaï. There are 22 villages on it, and it is 300 ri in circuit. The author cannot, however, vouch for the accuracy of this statement, for several geographers simply call the country an island on the coast of Eastern Tattan, (Tartary.)

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*A degree at the equator contains 21½ Japanese *ri*.

Beyond the inhabited part there is a long rocky promontory trending in a southwestern direction seaward, as may be seen by the map. Doctor Faksikf calls this country Yetso in his map of the world; and it is also called Karafouto and Naroubusi. Towards the northwest is a rugged chain of lofty and steep mountains, over which there is no practicable route. Beyond this chain to the northwest is the country of Santan and the Matsiou. We have no precise knowledge of Santan: the Matsiou are the Manchus of the Chinese, and this country does not appear to be far from Karafouto."

In the Japanese map of the world, to which Sendaï refers, Tarakay is represented as forming part of Manchuria; the Amur is called the great river Amuri-gawa, or Sagarïian, separating Yéroppa (Europe) from Aziya, (Asia,) and is placed several degrees to the north of this island, having the island of Sagarïian at its embouchure, and to the eastward of Kamsikatta, the country of the Orosya, (Russians.) He describes Tarakay as entirely independent of Japan, and states that "the natives send their young men among the Manchus and Yesoites to learn the languages of those countries, so as to become qualified to carry on trade with them. At Karafouto, the principal village, the Yesoites receive in exchange for the productions of their country, blue glass, eagles' wings, tobacco pipes, silk stuffs embroidered with dragons, satin dresses, cloths of various colors, and cotton goods. The blue glass, as well as eagles' wings, which come from Karafouto, are also found in Yeso; the tobacco pipes, on the contrary, are of Tartar workmanship, as they bear inscriptions in Manchu letters. These goods are procured from Pekin by the Manchus, and brought to Karafouto, and are frequently received at Matsmay by the Yesoites."

"In the sea between Karafouto and Yeso there are many hidden sandbanks and thousands of rocks, which make the two routes to it by sea extremely difficult; and on this account the commerce between the two countries has always been inconsiderable. To the east of Karafouto is the high sea; to the northwest lies Tartary, but at what distance is not positively known. From thence they bring green and blue beads, eagles' wings, and the stuffs worn by the Yesoites; the designs of these stuffs resemble those manufactured in China, from whence they are probably brought into Tartary. Karafouto, although so near to Yeso, is separated from it by a very rapid current, rendering the passage between the two countries extremely dangerous. In the sea to the east of Yeso is the Archipelago, called by the Japanese Tsi-Sima, or 'thousand islands,' (the Kuriles,) as may be seen on the map of that country. It consists of 37 islands. The inhabitants of Yeso frequent two of them, which are called Kounaziri (Kunachir) and Yedorofu," (Iturup.)

One of the Japanese names for Tarakay is Oku-Yeso, "Interior Yeso;" and in Kempfer's and other contemporaneous maps of Japan, it is represented as forming part of Tartary, and separated from Kamtschatka by a narrow strait. The fact of Yeso and Tarakay being separate islands remained doubtful until 1787, when La Peyrouse sailed through the strait, now bearing his name, to the north of Yeso, the discovery of which first established with Europeans their separation from each other.

The island is naturally divided into three tracts: the mountainous, which occupies the southern portion; the level in the middle; and the hilly tract, which extends over the northern districts. The mountain

region is the largest, and compehends more than one half of the island, terminating on the north at cape Délisle de la Croyère, near 51° north latitude. A chain of mountains begins at cape Crillon, and continues in an uninterrupted line northward to an elevated summit called peak Benizel, where it seems to be united to another and lower chain, which traverses the eastern peninsula, and encloses the bay of Aniwa on the east. Cape Aniwa is formed by a high isolated hill, which is connected by a low isthmus with a chain of hills which lie further north, and joins the principal range of peak Benizel. Further north occur other summits, as peak Lemanon, peak Mongez, and mount Tiara; the two last mentioned are north of 50° north latitude. None of these summits have been measured, but their elevation probably does not exceed 5,000 feet above the level of the sea. Along the western coast the mountains in some places come close up to the water's edge, but a narrow level tract generally separates them from the shore, and this tract is covered with high trees, while the declivities of the mountains are mostly bare, probably owning to the rapidity of their slope. Extensive flats occur at Aniwa bay and the bay of Patience. The low country which skirts the shore on the eastern side of the mountains appears to be more extensive and less interrupted than that along the western shores. On the eastern side the shore in some places is level and low, and in others elevated. The country extending from 51° to 53° north latitude is so low that the shores are not visible at the distance of five or six miles, and it is sandy and overgrown with bushes. The interior is in general level, partly sandy and partly swampy, and a greater part of it is covered with short bushes, or small trees. A number of low sandhills are dispersed over the country, which are destitute of trees, and appear like islands in a sea of verdure. The hilly part occupies the most northern part of the island, or that which extends from 53° north latitude to cape Elizabeth. The coast is, in general, high and steep, being mostly composed of perpendicular white cliffs. There are only a few tracts in which the coast sinks down to the level of the sea; and here the villages of the natives are built. The interior consists of a succession of high hills, covered with lofty trees to the very summit; the valleys which intervene between them are partly wooded, and partly covered with a fine close turf. This part of Tarakay seems to possess a considerable degree of fertility.

The forests consist of oak, maple, birch, medlar, willow, but chiefly pine and fir. Large tracts are covered with juniper trees. Gooseberries, raspberries, and strawberries abound, and also wild celery and watercresses. The wild animals are chiefly sables, foxes, martins, deer, and bears. The sea supplies the inhabitants with the means of subsistence in a great variety of fish. Whales are numerous on the coast, hitherto little frequented by whalers, and train-oil is an article of export.

The inhabitants are aborigines of the Aïnos race, and have settlements on different points of the coast. They are represented by La Peyrouse to be very superior in bodily strength to the Japanese, Chinese, and Manchus; their features are more regular, and more nearly resembling the form of Europeans. They are called by the Japanese Mozia; are mild, peaceable, generous, and warmly attached to each other; are very honest, well-disposed, and bear an excellent character with the Japanese. They worship the sun, moon, the sea, a God of the Heavens, and believe in the existence of the devil. They have no writing or money in use among them, but keep their reckoning on sticks of wood.

The Japanese have two trading establishments on *Aniwa bay*, at the southern extremity of the island, from which the southern islands of Japan are supplied with furs, peltries, seal-skins, dried fish, whale-oil, &c., and give in return lackered wooden eating and drinking vessels, tobacco and tobacco-pipes, kitchen utensils, rice, coarse cotton cloth, trinkets, &c. Tobacco is a staple article of traffic, and always in great request among the various tribes of the Aïnos and Tungousan races. They have no other settlement on the island, nor do they frequent any other part of it; no Chinese authorities have ever been seen there, nor is it enumerated among the possessions of the Chinese. According to the erudite Klaproth, Tarakay is not under the dominion of Manchurian China, as was once supposed, for it is entirely omitted in the great Chinese government geographical description of the empire, published at Pekin in 1790, and translated by him; and it does not appear that the Russians have ever made any trading settlement on the island, which has been rarely visited by their vessels or those of any other European nation.

La Peyrouse spent three months in exploring the gulf of Tartary, as far as the fine bay on the coast of Manchuria, which he named *Castrie's bay*, inhabited by a tribe of Orotches. He ascertained satisfactorily from the natives that there is no navigable communication between that gulf and the estuary of the Amur, called the gulf of Saghalien. About 30 miles to the north of that bay they assured him there is a sand-bank, or low neck of land, over which the traders, who descend the Amur to traffic with the natives of the gulf of Tartary, are obliged to drag their canoes. They called the island of Tarakay Tchoka. He discovered three good harbors, or roadsteads, on the northwest coast of the island, to which he gave the respective names of *Langle's bay*, 47° 49′, *Estaing bay*, 48° 59′, and *Jonquiere bay*.

Patience bay, 49° north latitude, and 146° east longitude, on the southwest of the island, is very extensive, and well adapted for a whaling and trading station. One of the most eligible locations for the establishment of a trading mart is on its northern extremity, at *North bay*, lying between capes Elizabeth and Maria, in 54° 24′ north latitude, and 142° east longitude. There is a lake of fresh water in its vicinity, into which several fine streams empty. The neighborhood is represented by Kruzenstern to be delightful, and the surrounding mountains covered with fine forest trees. It has a good and safe roadstead, with many local advantages for such a settlement; is situated within about one degree of the outlet of the estuary of the great Manchurian river Amur, which he explored, and found to be 5 miles wide, 3½ to 4 fathoms depth on the bar, and the water perfectly fresh for some distance at sea. Kruzenstern also states that the northwest coast of the island is infinitely preferable to the southwest; between the mountains, which are entirely overgrown to their summits with the thickest forests, there are valleys covered with luxuriant grass, and very capable of cultivation.

Whales are very abundant in the Japanese seas, which are now much frequented by our whalers during the summer months; rendering it most desirable that some arrangements be speedily made, under the sanction of our government, with the independent chiefs of this island for the privilege of frequenting any of its bays and harbors, except Aniwa bay, by American whale ships, for wood, water, provisions, recruitment, or repairs, and for traffic with the natives.

By our convention with Russia, of which a copy is hereto annexed, we possess, in common with that power, the right of navigation of the northern Pacific, and of fishing and resorting to any of the coasts of northeastern Asia, upon points which may not already have been occupied, for the purpose of trading with the natives.

Convention between the United States and Russia, signed at St. Petersburg on the $\frac{5}{17}$th of April, 1824.

"ART. 1. It is agreed that in any part of the great ocean, commonly called the Pacific ocean, or South sea, the respective citizens or subjects of the high contracting powers shall be neither disturbed nor restrained, either in navigation or in fishing, or in the power of resorting to the coasts, upon points which may not already have been occupied, for the purpose of trading with the natives; saving always the restrictions and conditions determined by the following articles:

"ART. 2. With the view of preventing the rights of navigation and of fishing, exercised upon the great ocean by the citizens and subjects of the high contracting powers, from becoming the pretext for an illicit trade, it is agreed that the citizens of the United States shall not resort to any point where there is a Russian settlement without the permission of the governor or commander; and that, reciprocally, the subjects of Russia shall not resort without permission to any establishment of the United States upon the northwest coast.

"ART. 3. It is, moreover, agreed that hereafter there shall not be formed by the citizens of the United States, or under the authority of the said States, any establishments upon the northwest coast of America, nor in any of the islands adjacent, to the north of 54 degrees 40 minutes of north latitude; and that, in the same manner, there shall be none formed by Russian subjects, or under the authority of Russia, south of the same parallel.

"ART. 4. It is nevertheless understood that during a term of ten years, counting from the signature of the present convention, the ships of both powers, or which belong to their citizens or subjects, respectively, may reciprocally frequent, without any hindrance whatever, the interior seas, gulfs, harbors, and creeks, upon the coast mentioned in the preceding article, for the purpose of fishing and trading with the natives of the country.

"ART. 5. All spirituous liquors, fire-arms, other arms, powder, and munitions of war of every kind, are always excepted from this same commerce permitted by the preceding article; and the two powers engage, reciprocally, neither to sell, nor suffer them to be sold, to the natives by their respective citizens and subjects, nor by any person who may be under their authority. It is likewise stipulated, that this restriction shall never afford a pretext, nor be advanced in any case, to authorize either search or detention of the vessels, seizure of the merchandise, or, in fine, any measure of constraint whatever towards the merchants or the crews who may carry on this commerce; the high contracting powers reciprocally reserving to themselves to determine upon the penalties to be incurred, and to inflict the punishment in case of the contravention of this article by their respective citizens or subjects."

5. Russian and Japanese Kurile Islands, &c.

The Archipelago of the Kuriles consists of 22 islands, including Yeso, and is about 600 miles in extent, connecting the peninsula of Kamtschatka with the island of Niphon. The northern islands were first discovered and occupied by the Russians in 1713. They derive their name from the Russian word kuril, "to smoke," from the smoking volcanoes on some of the islands. They are naturally divided into two chains: one lying south of the Boussole strait, in 46° 30′ north latitude; the other to the north of it. The southern chain is called the Greater Kuriles, and more properly belongs to Japan; but several of the islands have been successively occupied by the Russians for trading with the natives, and they even claim, in common with the Japanese, Kunachir, Urup, and Iturup. The northern chain, embracing island No. 1 to No. 16, called the Little Kuriles, are dependencies of Kamtschatka, and are comprehended in the Russian government of Eastern Siberia. Most of the natives of this chain have been baptised, and are occasionally visited by Russian missionaries of the Greek church. The population is about 1,400.

The Kuriles are called by the Japanese Tsu-sima, and also Kooroomitsi; the latter signifying "road of sea-weeds," from the great abundance of the *fucus saccharinus*, or "sea cabbage," an article of food in general use among all classes, with which they abound. They are thinly inhabited by tribes of Aïnos, are mostly uncultivated, and abound in valuable fur animals. The natives subsist by hunting, fishing, and catching whales.

The following islands of the chain belong to Russia:

No. 1. The nearest Kurile island to Kamtschatka is called *Shoumtshu*. The channel between Lopatka and this island is about 10 miles in breadth. The length of the island, from northeast to southwest, is 34 miles, and the breadth about 20 miles. It is a flat island, with moderate ridges of hills, and watered throughout, and has a small lake nearly in the centre. It is rich in minerals; but is chiefly visited for the sea-otter and red fox, with which it abounds; its salmon is in much request.

No. 2. The second island is called *Poromuchir*, between which and the former island is a strait three quarters of a mile in breadth. It lies from northeast to southwest, and is twice as large as the first island. It is hilly and well watered; has no timber, but has valuable mines. It produces the red fox, wolf, sea-otter, &c.

No. 3. *Shirinki*. The distance from the last named island to this is computed to be about 17 miles. It is remarkable for a bee-hive shaped mountain of considerable altitude. This island is nearly as broad as it is long, and about 27 miles in circumference. It abounds with sea lions and various marine animals, which are carried there by the floating ice. The want of a safe anchorage prevents this island from being much frequented.

No. 4. *Makan Kur Assey* island lies 40 miles from the latter, and is in length 14 miles, and about 7 in breadth. It is covered with brushwood, is badly watered, but supports the red fox and sea beavers, and a large number of seals are caught on it.

No. 5. *Anakutan* island is situated about 23 miles distant from the latter. This island is in length 66 miles, and in breadth about 10 miles. Three summits of mountains exhibit themselves, which are exhausted craters. The red fox and sea-beavers are numerous.

No. 6. *Amakutan* island is not more than 4 miles from the latter. It is 14 miles in length and 7 in breadth; produces foxes, and its shores abound with sea-lions and otters.

No. 7. *Syaskutan* island is separated from the latter about 33 miles, and the current between them most rapid. Its length is about 54 miles, and only about 4 in breadth. Its productions are similar to those of the former island.

No. 8. *Ikarma* is a volcanic island, about 8 miles from the latter, and only about 5 miles in circumference.

No. 9. *Tschimkutan* island is 20 miles distant from the former, round in form, and about 10 miles in diameter. The coast is mountainous and rocky.

No. 10. *Mussyr* island is 24 miles from the 9th island, and not more than 2 miles in diameter: produces a large quantity of wild fowl.

No. 11. *Rach-Koke* island is 80 miles from the last mentioned, and its length and breadth is about 14 miles. This island looks like a solitary mountain shooting upwards from the sea. A continued burning of this island has filled up 13 fathoms of water, and converted a large place into shoals and banks.

No. 12. *Mutova* island is situated 30 miles from the former, and is 20 miles long and 17 broad. There is a volcanic mountain to the south which emits smoke; to the north are several rich valleys and habitable plains. About 100 of the inhabitants pay tribute to Russia.

No. 13. *Rassegu* or *Raschaua* island is 20 miles distant from the latter, and in extent about 20 miles every way. This island has several lofty mountains, rocky shores, and sandy bays. It is covered with excellent timber, nourishes sea-birds, beavers, and seals.

No. 14. *Ussussyr* island lies 12 miles from the former: it is, properly speaking, two islands lying close together, occupying a space of 17 miles each way. It abounds with rocks, cliffs, and hot springs. The productions are similar to the latter.

No. 15. *Keoli* island is situated at the distance of 24 miles from the island of Ussassyr, and is 20 miles in length, and only 7 in breadth. This island has three mountains of considerable altitude. The white and black bellied red fox, so much esteemed for his skin, is here found in abundance.

No. 16. *Semussyr* or *Mareekan* island is 20 miles distant from the latter. The extraordinary length of this island gives it a peculiar appearance to the mariner. Its length is ascertained to be about 87 miles, and not more than 7 in breadth. Four mountains are visible on the island, with evident traces of volcanic eruptions about them. The timber is excellent, and the various animals in request are numerous. The passage from this to the next island of the south chain is upwards of 134 miles in extent, and is called Boussole strait by La Peyrouse.

To the Japanese properly belong the following islands:

No. 17. *Tshripo-Oi*, and two other adjacent small islands, are estimated in length and breadth about 10 miles. A volcanic eruption at some remote period has covered these islands with stones, so that they are perfectly useless.

No. 18. *Urup* island is about 134 miles in length and 14 in breadth. Its physical aspect is lofty mountains and deep glens. On the northern side lie four small isles, which produce good timber and abundance of

vegetables. Streams from the mountains traverse the island and fall into the sea. This island is considered to be rich in minerals, but is only visited for the red and white foxes, which are very numerous. The commandant of the Russian Kuriles usually resides on this island.

No. 19. *Iturup* or *Etoorpoo* island lies 20 miles distant from the foregoing, and is about 200 miles in extent. Several lofty mountains adorn this island, which is covered with forests of noble timber, consisting of larch, pine, oak, birch, cypress, &c. The other productions are black bears, sables, foxes, fish otters, salmon, sturgeon, &c. In stormy weather whales and dolphins are thrown on the shore. The inhabitants are the genuine aborigines, or hairy kuriles, known to the Japanese by the various names of Yeso, Aïnus, Astoumi-Yebis, "eastern barbarians," Morin and Momin, "hairy men," "hairy people." The earliest mention made of them in history was under the Japanese name of Momin, in a Chinese work called Chan-hai-king, written during the dynasty of Han, B. C. 150. Their country is described as situated beyond the Eastern sea, and the bodies of its inhabitants covered with hair. They congregate in villages, and pay a nominal tribute to Russia. On this island is the town of *Ourbitch*, with a Japanese fort, and a port not far from a volcano of the same name. The Japanese name of the island is Howrouss.

No. 20. *Kunassyr* island is situated about 30 miles distant from Etoorpoo. Its estimated length is 100 miles by about 33 miles in breadth, and is entirely surrounded by mountains and lofty summits. In the centre of the island are large tracts of low land covered with good timber. The productions of the southern portion are a great variety of vegetables and fish. A pearl-bearing muscle as large as a dessert plate is found here, and the inhabitants sell large quantities to the Japanese traders. Tribute is also paid to Russia in this article.

It was on this island that Captain Golownin of the Russian navy, while engaged in exploring the southern Kuriles in 1811, was seized and imprisoned by the Japanese authorities, and detained in captivity at Matsmai until 1813, in retaliation of a hostile attack made in 1807 by an armed party of Russians under Lieutenant Chwostoff, upon the Japanese settlements in the bay of Aniwa, island of Tarakay.

No 21. *Tchikota* island is 47 miles distant from the latter island. Its length is about 80 miles, and breadth 28 miles. The features are lofty mountains, fertile plains, and several lakes, which teem with excellent fish. At the southern extremity are two small islets, which are covered with good timber.

No. 22. *Yeso.*—This island, the southernmost and 22d of the chain, is a dependency of Japan, and lies in 41°—47° 30′ north latitude, and 140°—147° east longitude. It is about 300 miles in extreme length, and about the same breadth. Bounded on the west by the gulf of Tartary, on the east by the islands of Kunachir, Iturup, and Tcikota, and the northern Pacific ocean; on the south by the island of Niphon, from which it is separated by the strait of Sangar, 18 miles wide; and on the north by the island of Tarakay. In Balbi's "Abrégé de Géographie," edition of 1842, adopted by the University of France, this island is divided into the *Government of Yeso*, embracing the southwestern peninsula of the island whereon Matsmay and Chakodade are situated; and the *Aïno-Koumi* or "country of the Aïnos," in which we are to distinguish the districts sub-

ject to the Japanese lying on the southern and eastern coasts, containing Atkis and Edermo, from those entirely independent of Japan, and comprehending all the rest of the island.

Yeso signifies "the coast" in Japanese, and its inhabitants are the aboriginal Aïnos. By some geographers the island is erroneously called Matsmay, the name of the southern province and capital. By the Kamtschatkadales it is called Chicha, chish being the Japanese word for needles and iron, which were first introduced into that peninsula from Yeso by Japanese traders before the arrival of the Russians in those seas. The Japanese call the natives of the southern part of the island Koutsi-Yeso, or "Yeso of the mouth of the country," and those of the northern part Oku-Yeso, or "Yeso of the interior;" and the mountaineers Yama-Soumi-Yeso. The ignorance that so long prevailed respecting its extent and position has been justly described by M. Buache in his "Considerations Géographiques et Physiques" in the following terms: "Jesso, after having been transported to the east, attached to the south and afterwards to the west, was at last found in the north."

The whole island is divided into six provinces or districts, of which *Matsmay*, or "South of the Pines," is the southernmost, the chief town and residence of the hereditary prince governor. The name was conferred by imperial letters patent of Siogoon Yori-firo, in 1594, on the Japanese prince Nobou-firo, whose ancestors conquered the southern part of the island, and built the town in 1443. The town of Matsmay is situated on the strait of Sangar, on a large commodious bay, with a good anchorage in 4 fathoms. The harbor is constantly filled with Japanese vessels trading to every part of the empire. It has a population of about 50,000, and may be considered the most important town in this extremity of Asia. The place is well fortified and garrisoned; guards are constantly kept up on the coast to observe narrowly every thing that passes. It has the small bays of Koru-yesi on the east, and Otube to the west of the town.

Chakodade, the second town in magnitude on the island, is also situated on the strait of Sangar, southeast of Matsmay, on the declivity of a high circular hill, which rises above the peninsula there formed. It is washed on the south by the bay of Sangar, and on the north and west by the bay of Chakodade, which is very convenient for receiving a large fleet. The peninsula forms its junction on the east by a narrow strip of land, so that there is at once a view of the open sea and the low grounds.

On the northern side of the bay a spacious valley extends over a circuit of fifteen or twenty miles, bounded on three of its sides by hills. In the centre of this valley lies the village of Onno, the inhabitants of which are chiefly occupied in agriculture. The other villages which are situated on the coast are for the most part inhabited by fishermen. The hill, at the foot of which the town is built, serves as an excellent landmark for ships entering the bay, as it is easily recognised at a distance by its circular form, and is detached from every other elevated object. On the western side this hill is formed of huge masses of rock, in one of which there is a cavity perceptible from the sea. The depth of water close in land is very considerable on the southern and western sides of the peninsula; but as there are neither sand banks nor rocks to be apprehended, the coast may be approached without danger. There are, however, numerous sand banks on the northern side, and consequently only small vessels can get up to the town. From the projecting cape opposite the town a sand-bank of un-

equal depth extends one-third of the breadth of the bay. On the northern and eastern sides of the bay the depth of the water gradually diminishes towards the shore.

The Japanese towns and villages on the island are large, have regular streets, and the houses, on account of earthquakes, are all neatly built of wood. Every house has a kitchen garden, and many are furnished with orchards. The cleanliness which prevails in the streets and houses is truly astonishing. The inhabitants, says Golownin, are extremely lively, and content and cheerfulness are painted on every countenance. The boundary between the Japanese and Yesoite villages is about 100 miles from Chakodade.

The principal bays on the southeastern coast of the island are *Volcano bay*, in latitude 42° 19′ 20″ north, and longitude 141° 7′ 36″ east, secure and spacious, having the inner and well-sheltered harbor of *Edermo;* the *bay of Good Hope*, and *Atkis bay*, now beginning to be frequented by our whalers. The best harbors on the northwest coast are in *Soukhtalen bay* and *Strogonov bay*. Near the centre of the island is a lake called Oonoma, about 15 miles long and nearly as broad, having its outlet in the river Isikari, a very rapid stream, which falls into Strogonov bay.

The aspect of the island, particularly in the southern provinces, is wild and mountainous. A rugged chain traverses it from northwest to southeast. Active and extinct volcanoes are visible. The northwestern provinces are said to be more fertile than the southern, producing everything necessary to support life, and is well cultivated by Japanese emigrants.

The timber forests consist of oak, pine, birch, elm, scented cypress, and other valuable woods; ginseng and various medicinal plants are found; deer, elk, bears, wolves, wild goats, sables, foxes, and other wild animals, are numerous. The bears are uncommonly fierce, and attack men as well as other animals. Among the birds are three species of falcon and lammergeyers; and in summer, geese, swans, and ducks. Salmon, cod, herring, mackerel, and other varieties of fish and shell-fish, tripang, beavers, sea-otters, seals, morses, sword fish, whales, &c., are very plentiful on the coast; and Rensifée Sendaï, in his description of the island, avers that an enormous sea-monster, called by the natives *Okime*, resembling, by all accounts, the kraken of the Norwegian seas, has been seen on the coast of Yeso.

The Yesoites are generally tall and strongly made, very active, and far more handsome and manly than the Russian Kuriles. They appear to be a distinct race of people from the inhabitants of the other islands; and have a language of their own, which, though it contains many Kurile words in common use, is totally unintelligible to the other Kuriles.

The principal occupation of the natives is hunting, felling timber, and burning charcoal, fishing and gathering *kambou*, (fucus saccharinus,) called by the Russians sea-cabbage, which is found in great abundance on the coast, and is a favorite article of food among all classes in the Japanese empire.

The kambou is spread out upon the sand to dry; they then collect it together in heaps, resembling hay-cocks, and cover it over with matting until the time arrives for loading the vessels which carry it to the ports of the southern islands of Japan. Everything produced by the sea is considered eatable by the Japanese; fish, marine animals of every description, sea plants and weeds, are all made to contribute to their support.

There is a trading factory established by the Prince governor in each of the provinces of the island, where, on making his agents a small present, the Yesoites are allowed the privilege of bartering their furs, dried fish, &c., for such articles of Japanese manufacture as they may want. The Japanese traders carry on a clandestine traffic with the Russians at the adjacent Russian Kurile islands, for dried fish, whale-oil, bear and seal skins, eagles' wings and tails, and also for woollen cloths of various colors, chiefly red and yellow, glass ware, glass beads, strings of amber, hardware, boots, &c. of European manufacture, for which they pay very dear rates, and give in exchange rice, clothes, tobacco pipes, cotton manufactures, domestic utensils, and other things.

The Japanese give a high price for eagles' wings and tails, as they use the feathers for their arrows. The yellow cloth is reserved for distinguished visiters; a piece of a suitable size is usually spread out where it is intended the guest shall seat himself. Cloths of other colors are made into wearing apparel. Woollen cloth is not manufactured by the Japanese, no sheep being raised in any part of their dominions.

The Yesoites make their dresses out of various fibrous substances—bark of trees and skins of animals; and they also receive clothing in exchange for their commodities from the Japanese, Chinese, Manchus, and Russians; on which account a great diversity of habiliments is often observed among the members of a family occupying the same dwelling. The women are employed in weaving cloth for garments, and other necessary domestic work. In summer they live in huts made of wood, covered with bark, and in winter in huts of earth; the floor covered with mats. Their weapons are bows with poisoned arrows, spears, and Japanese swords. They are not permitted the use of powder or fire-arms. The smoking of tobacco is a favorite amusement with both sexes.

Polygamy is allowed among them; some of the chiefs have a number of wives. They live in admirable harmony with each other, and are in general mild and good hearted, hospitable, friendly, and polite. They have no writing, consequently no written laws; everything is handed down by tradition from generation to generation. The chiefs are elected by the natives, and confirmed by the Prince governor. Many of the natives are Budhists, and all are left to their own choice of religion, laws, customs, and dress. The island serves as a place of exile and punishment for political offenders from Japan.

Matsmai was visited by European traders as early as 1612, when the English had a factory at Firando, in Japan; they sold the Yesoites pepper, broadcloth, and elephants' teeth, and received in exchange bars of gold and silver. There are said to be several rich mines of those metals, as well as of copper, in the island, which the Japanese government will not allow to be worked, from an apprehension that foreigners, particularly the Russians, would be tempted to conquer and occupy the country.

According to a Japanese author, the Empress Catharine is reported to have said, "that it should always be the object of her children and grandchildren to seek to increase the Russian empire, and extend its frontier." "The Orotz," (Russians,) says the same author, "obeyed this injunction, and occupied the whole of the country of Kamtschatka. They named a governor, and obliged each inhabitant to bring in as tribute a deer skin. They then began to trade with the island of Yeso, receiving pepper, sugar, and linen, in exchange for gold and skins. We Japanese gather

neither gold nor silver; we even make a secret of having such costly articles, for fear the Russians should take possession of the country. Yeso is to our kingdom as the lips and teeth are to the body. We must always be on our guard."

Note.—Since the reference of this memoir to the Committee on the Library, I have received the "Overland Singapore Free Press," of the 6th January, 1848, which contains an interesting account of the shipwreck of the American whale ship Lawrence, Captain Baker, of Poughkeepsie, New York, during a heavy gale the 26th May, 1846, upon a rock not laid down on any chart, in latitude 44° 30' north, and longitude 153° east, in the vicinity of the Kurile islands. George How, the second mate, and six of the surviving crew, took to the only boat left, and succeeded in reaching land the 3d of June, in a destitute and famished condition. By their account they must have landed on the island of Yeso, near the bay of Chakodade, where they met with a most inhospitable reception by the Japanese guard stationed on the coast, who took them for Englishmen, and kept them eleven months in close confinement. They were then stowed away in the close hold of a vessel three or four months, without being allowed to go on deck to breathe the fresh air, and in that condition sent to Matsmai, where, after undergoing a very strict examination before the Prince governor, they were ordered to Nangasaki. During the voyage they were landed at a town on the Japanese coast, each man enclosed in a box covered with a lid, and in that condition taken to the town hall, where they were subjected to a rigid examination, and then returned in the same manner to the vessel. On arriving at Nangasaki they were put in prison, and compelled, to save their lives, to trample and spit upon a picture of the crucifixion. At length, after seventeen months, in all, of close confinement, privations, and ill-treatment, during which they were obliged to submit to frequent and vexatious interrogatories, the Japanese becoming satisfied they were Americans and not Englishmen, released and sent them to the Dutch factory at that port. Mr. Levyssohn, the resident of the factory, was mainly instrumental in procuring their release, and providing them with a passage to Batavia, in one of the Dutch ships. Before their liberation one of the men attempted to escape from prison, and was put to death by the Japanese.

The inhospitable and rigorous treatment of those shipwrecked American seamen by the Japanese, is in striking contrast with the philanthropy and kindness displayed by Captain Mercator Cooper, of the American whale ship Manhattan, in rescuing twenty-two Japanese mariners from a desert island and sinking junk, and making a considerable deviation from his voyage to land them at Yedo the 17th of April, 1845; for which he received the thanks of the Siogoon, and marked attentions of the high officers of his court, together with abundant supplies of wood, water, and provisions, free of charge, as stated in the before mentioned document, No. 96, H. R.

By a letter received from a gentleman who has long resided in Japan, as physician to the Dutch factory of Dezima, we learn that the courtesy, moderation, and forbearance of Commodore Biddle and his officers, during the short stay of the American squadron in the bay of Yedo, in July, 1846, had inspired both the government and people with the highest

opinion of the nation he represented, and has favorably disposed them towards it. The Japanese government had caused orders in writing to be drawn up, to be delivered to the commanders of foreign vessels, allowing them to anchor north of the Covalhos, near the entrance of the bay of Yedo.

In the *Loo-choo islands*, dependencies of the Prince of Satzuma, island of Kiu-siu, two Catholic missionaries have been permitted to reside since 1844. The Rev. Mr. Forcade, one of the number, in a letter to his superiors, dated Great Loo-choo, August 12, 1845, states that he had acquired a knowledge of the language, and compiled a dictionary of more than six thousand words; that everything at Loo-choo is Japanese in worship, language, dwelling-houses, furniture, manners, and customs; that he had not yet seen a Chinese junk in the port of Nafa, while there were constantly at anchor ten to fifteen Japanese vessels. The island is now frequently visited by European and American vessels. In 1846 an American whale ship foundered on a rock near Loo-choo; she was raised, repaired, and sent on her voyage by the assistance of the subjects of the Prince of Satzuma.

Port Melville, called by the natives Ou-ting, or Vouching, on the western coast of the island, has a good, safe anchorage in 19 to 20 fathoms water, protected from all winds; and offers peculiar advantages and facilities for careening and repairing vessels, so much wanted in those seas. Its shores are studded with populous villages, and the country around is fertile and well cultivated.

6. Steam Communication with China.—Superior Commercial Advantages of Chusan.

In addition to the steamers now in active progress of construction at this port for the transportation of the United States mail, passengers, and freight between Panama and Columbia river, the increasing importance of our trade with China and the Indian Archipelago would warrant the immediate establishment of another line from Panama to Shanghai, Canton, Manilla, &c., either in connexion with that line or from Panama direct, to touch and coal at the Sandwich islands. From New York to Panama is about 1,950 miles, from Panama to Sandwich islands 4,780, thence to Shanghai or Chusan 4,470; in all 11,200 miles; and it is calculated the passage could be performed by American steamers within 45 days. From Panama to Tehuantepec is about 1,200 miles, to Acapulco 1,500, Manzanillo 1,800, San Blas 1,962, Mazatlan 2,100, Guaymas 2,450, San Diego 2,760, Monterey 3,120, San Francisco 3,200, Columbia river 3,570, and Yedo, Japan, 7,950 miles.

Coal of an excellent quality and in great abundance has been found at the following places on the American coast of the Pacific, viz: Panama; island of Santa Cruz, near Santa Barbara; bay of San Francisco; Vancouver's island, in the straits of San Juan de Fuca, and Puget's sound; and its existence has been ascertained at various other points near the coast. In China it is found in inexhaustible quantities on the banks of the great river Yangtszekang, at Shanghai, and the island of Formosa; in Borneo, and several of its adjacent islands; and in the island of Ceram, in the Indian Archipelago; at Junk Ceylon, on the west coast of the Malayan peninsula, where the natives offer to deliver it in Penang at $3 per ton;

and at the Nicobar islands, in the bay of Bengal, belonging to Denmark, and recently colonized by the Danes. It is found in Assam and Aracan. Excellent bituminous coal is also very abundant, and has been used for fuel from time immemorial in the Japanese islands; which, in the course of events, must, ere long, be opened to our commerce. Extensive coal-fields have been discovered in Australia and New Zealand.

The Chinese island of *Chusan*, besides its superior local advantages for trade, is most eligibly situated for a halting and coaling station for such line of steamers; rendering it highly desirable and important that the ports of the Chusan Archipelago should be opened to American commerce. The island is about 23 miles in lenth by 7 to 11 in breadth, situated 7 miles from the main land of China, and distant 40 miles from Ningpo. The population of the whole group is estimated at 300,000.

Tinghae, the capital, is in 30° 10′ north latitude, and 122° 14′ east longitude. Population about 30,000. Besides Tinghae, the Chusan group possesses several fine bays and harbors, with good and safe anchorage for the largest vessels, with plenty of good water, and admirable sites for dock-yards, so much wanted for the repair of ships in the China seas. The rise and fall of the tide is twelve and a half feet. The climate is considered the healthiest of any part of the coast of China, the thermometer rarely rising in summer to 86° Fahrenheit. It is accessible to vessels proceeding in any direction to or from Chusan; is in the route of an immense Chinese coasting trade, and of the junks which trade with Manchuria, Corea, Japan, Loo-choo islands, Indian Archipelago, Manilla, Borneo, Cochin-China, Siam, Batavia, Singapore, and Malacca. Its geographical position, at the central point, and to the windward of the coast of China, near the Peiho and Yellow rivers, opposite the Great Yangtsze-kang river, give it unrivalled natural advantages for commerce over every other port on the coast of China. It is within a short distance of Chapu, the seat of the China-Japanese trade, within two days' sail of Japan; the same from Corea, and five days' sail from Pekin.

Chusan was captured by the British during their late war with China, and occupied by their forces until January, 1846, when it was surrendered to the Chinese, under the treaty, in exchange for Hong Kong.

In Gutzlaff's "Retrospect of the Two Years of Peace," he describes the island as "fertile, containing a dense, industrious, agricultural population; and for the whale fishery presents great facilities, for, during summer the fish go to the Japanese seas, and along the coast of Corea, whither they have never yet been pursued. Vessels, therefore, fitted out in this island, would be just in the track.

"As a commercial emporium, few places in Asia can vie in point of situation with Chusan. On the opposite main are the most flourishing cities, as respects manufactures as well as commerce. In its neighborhood the largest rivers of China disembogue, and these will always be the high road of commerce.

"We would look upon Chusan as another Malta, not in point of natural strength, but of political importance for the maintenance and undisturbed enjoyment of a commerce which, after the opening of Japan and Corea, and access to Manchuria, will certainly rival the whole of our Mediterranean trade."

The port of *Shanghai*, lying about one degree north of Chusan, being immediately adjacent to the richest districts of the Chinese empire, and

especially to those which produce the principal articles of export, promises to become a formidable rival to Canton, and will inevitably draw from it a considerable portion of its traffic. It is the shipping port to Suchau, situated about 40 miles distant, and one of the most populous, wealthy, and important cities in China, celebrated for the variety and excellence of its manufactures, especially of silk. According to the report of the select committee of the House of Commons of the 9th July, 1847, "on commercial relations with China," Shanghai already furnishes 16,000 out of the 20,000 bales of silk, and 10,000,000 out of the 57,622,802 lbs. of tea, which China, in 1846, appears to have furnished for British markets.

Sir John Davis, in a despatch of the 24th February, 1847, states that "Shanghai must be expected to attract to itself, in due time, the largest portion of the British trade; it seeming to be impossible that teas should long continue to bear the heavy charge of transport to Canton from the north when they can be delivered so near the place of production."

The commanding position and local advantages of *Quelpaert* island, latitude 83° 20′ north, and longitude 126° east, lying in the Corean Archipelago, for trade with the Corean peninsula, east coast of Manchuria, and Japan, as well as for whaling, were briefly indicated in my letter to the Hon. James Buchanan, Secretary of State, of the 28th November, 1846, printed document of the House of Representatives No. 96, of the last session. The British have since taken possession of this island, with the intention of permanently occupying it as another link in the long chain of their maritime stations in the Indian Archipelago, and seas of eastern Asia, and by which they will be enabled to open up the trade of Corea, the northern provinces of China, Manchuria, and the Japanese islands.

Their possessions in those seas, including this island, now embrace Port Essington, on the Cobourg peninsula, Northern Australia; Cape York, and the adjacent islands on Torre's straits; the southeast coast of Papua; the Straits settlements of Penang, Malacca, and Singapore; the island of Labuan, on the northwest coast of Borneo; and the island of Hong Kong, on the south coast of China.

The commander of her Britannic Majesty's surveying ship Bramble, landed in April, 1846, at a cape in Papua, or New Guinea, which he called Cape Possession, in latitude 10° 19′ south, and longitude 148° east, where he hoisted a British flag, and took possession of the coast in the name of Her Britannic Majesty. There is an extensive range of mountains visible from the coast, 9,000 to 10,000 feet high, which he called Mount Victoria; there are also several intervening ranges of mountains of inferior altitude, covered with primitive forests, which gave him reason to suppose that the country was well-watered and fertile.

The whole coast appeared thickly inhabited. Their villages consisted of large and respectable looking huts, the land near them presenting a very agreeable and fertile appearance. They were frequently visited by the natives, who brought off cocoanuts, sugar-cane, sago, a sort of arrow-root, as well as specimens of their arts and manufactures, such as bows, arrows, spears, ornaments, &c., which they readily exchanged for such trifles as were offered them. They have double and single canoes; some of the former being capable of carrying from fifty to one hundred men, and the latter two or three.

The previous surveying expedition in Her Britannic Majesty's ship Fly,

discovered in 1845, on the same coast, the delta of a large river, 5 miles wide, in latitude 8° 40′ south, and 143° 30′ east longitude, and which they supposed to be navigable a long distance in the interior.

The island is inhabited by two distinct races of people, the Papuas and Horaforos, who subsist upon the spontaneous productions of the earth, and by fishing. No European nation, except the Dutch, have heretofore had any commercial intercourse with this island, and they have no settlement on it. The natives of Ceram and Goram are the principal traders with Papua. The chief articles of import are iron tools, chopping-knives and axes, blue and red cloth, Chinese beads, plates, basins of China, and other similar articles, in exchange for *slaves*, amber, ambergris, tripang, edible birds' nests, tortoise shell, pearls, pearl shells, mother-of-pearl, black loories, large and red loories, birds of paradise, and many other kinds of birds, which the Papuans have a peculiar way of preparing; wild nutmegs, rose maloes, ebony, iron wood, various odoriferous, medicinal, and dye woods, camphor, sago, cocoa, palm oil, gold dust, and diamonds. One of the most important articles of export is a bark called Massoy bark, which is taken by the Dutch to Java, where the powder made of it is extensively used by the natives for rubbing the body, and fetches $30 per picul of 133⅓ pounds.

7. Special Mission to the East—Steam navigation on the Indus and Brahmaputra, &c.—Extensive caravan trade with Northwestern and Central Asia, &c.

In view of our expanding commerce on the Pacific, and of the importance of adopting early measures for opening and extending our commercial intercourse with all the oriential nations, I take leave most respectfully to invite your favorable consideration of the proposed mission to the East, which I had the honor of submitting to Mr. Buchanan in my above mentioned letter of the 28th November, 1846.

In addition to the oriental nations therein briefly noticed, and with which the United States have not made treaties, the recent annexation of the States of Sinde and the Punjaub, including the provinces of Cashmere and the Hazarahs, to the British Indian empire—the general tranquillity now reigning in the kingdoms of Beloochistan, Afghanistan, Koondooz, Bokhara, Khaurism, Kokan, or Ferghana, and their dependencies, together with the political, scientific, and commercial mission sent by the governor general of British India, in August last, to Tibet and Turkestan—will open new markets for an extensive and profitable commerce in those vast regions of northwestern and Central Asia by the route of the Indus, in which, by the negotiations now in progress between Mr. Bancroft and Lord Palmerston, it is presumable we may shortly be allowed to participate.

It is worthy of remark that a portion of those Asiatic countries embrace the Indo-Scythia, Bactria, Transoxiana, Marycanda, Hyrcania, Parthiana, and Parapomisus, of classical antiquity; and the Sogd, or "valley," and Maver-ul-naher, or "country beyond the river," of the early Arabian geographers, which they extolled as "the most delightful of all places which God created."

The erudite Professor Lassen, of Bonn, has discovered and identified the ancient name of the Afghans with that of *Uskanghar*, in the catalogue

of nations tributary to the Great King, engraven in cuneiform characters on the monuments of Persepolis; they are descendants of the Hebrew tribes.

Those countries were celebrated before the memorable Indian expedition of Alexander, B. C. 327, for the great variety and value of their commercial products, their rich mines of gold and precious stones, such as rubies, amethysts, tæjeloves, lapis lazuli, &c., and as the thoroughfares of an extensive commercial intercourse, by caravans of Bactrian camels, between India, China, and the western nations.

"On the road between Hindostan and Khorasan," says the Emperor Baber, who was a native of Ferghana, "there are two great marts—the one Caubul, the other Candahar; caravans from Ferghana, Turkestan, Samarcand, Balk, Bokara, Hissar, and Badakshan, all resort to Caubul, while those from Khorasan repair to Candahar. The productions of Khorasan, Rūm, (Europe,) Irak, (Persia,) and Chin, (China,) may all be found in Caubul, which is the very emporium of Hindostan."

The Bolor-Tag, the Imaus of the ancients, forming the meridian axis of Central Asia, has been for many centuries the boundary between the empires of China and Independent Turkestan. The "Cloudy Mountain," and various other etymologies, have been assigned for the origin of its name; but the most probable derivation, according to Humboldt and the traditions of the neighboring nations, is from a corruption of Vardurya, the Sanscrit for lapis-lazuli, for which the mountains of that chain have been celebrated from the earliest ages. The culminating points of the Bolor are about 20,000 feet above the sea level; but where it intersects the other chains parallel to the equator, such as the Thian-shan or "Celestial mountains," the Kouen-lun, and the Himalaya, the elevation is greater. It is crossed in three principal points, viz: that of Yarkand to the north, that of Pámér, and the one traversed by the Jesuit Goes, in 1603. But the pass by lake Sir-i-kol, or Victoria lake, in the high table land of Pâmér, the source of the Amu Derya or Oxus, in 37° 27′ north latitude, and 75° 40′ east longitude, is the most frequented. This route was re-discovered and described by Lieutenant Wood, of the Indian navy, in 1838, and is about 15,000 feet above the level of the sea. He verifies the general accuracy of the account respecting it given by Marco Polo, the Venetian traveller of the thirteenth century. The productive and valuable ruby mines of Badakshan, in the Khanat of Koondooz, are situated in the mountain district of Gharen, on the right bank of the river, which is about 1,000 miles in length, navigable for large vessels upwards of 600 miles, and falls into lake Aral. This river, the lake, and the Caspian, were in early time the great channels of communication, for the purposes of trade and war, for a large portion of the route between the Indus and the Black Sea.

Were Bokhara, Khaurism, Kokan, and Koondooz, to be connected by steam communication, for which the Oxus, the Syr Derya or Jaxartes, and lake Aral, as well as the hard, level desert, afford such facilities, they would form a powerful commercial confederation—give laws to Central Asia, and make their influence be felt from Siberia to the Himalaya, and from the Caspian to China.

The Indus (Sindhu in Sanscrit) is now regularly navigated by steamers from the port of Kurrachee to Attock—a distance, by the course of the river, of 942 miles—in connexion with a line from that port, the emporium of the Indus, to Bombay. Its mean width is 680 yards, and

in the driest season of the year, 9, 12, 13, and 15 feet are the usual measures of depth below Attock. The sources of this great river have never been fully explored. It is certain that it rises in the Himalaya mountains near Tibet. It is probable that the Skayúk, from Karakorum, and the river Ladak, from near the "Sacred Lakes" of Rāwán-Hrád and Manasaróvara—held in superstitious reverence by the Hindoos—are its principal affluents. It receives the Abá Sín, and passes on to Attock, where it is joined by the Caubul. One of the sources of this tributary descends from Pámér, and is nearly as remote as the principal branch. From Attock to the sea it is familiarly known to the natives by the name of "Sind," or "Attock." The water is sweet and good, and the current runs about four miles an hour. It is subject to very sudden rises, and as rapidly falls. A few miles below Tatta it divides into two large arms, which subsequently are further broken into numerous branches, forming the Delta of the Indus, the base of which, measured in a strait line from the western to the eastern embouchure, conveys the main body of the Indus towards the ocean, preserving a similar magnitude to that of the parent stream; but from the loose and changeable nature of the soil, the mouths are constantly changing. The influence of the tide is irregular, and varies from four to twelve feet, and is not visible at a greater distance than 60 to 65 miles from the sea.

An enlightened plan was conceived by Firoz III, in the fourteenth century, for uniting the Indus and the Ganges by means of the Sutledge and Brahmaputra, thus connecting Assam with the west of India, developing a grand scheme of internal navigation of upwards of 5,000 miles in extent across that continent. The commerce carried on by means of the Indus during the reign of Aurungzebe, in the seventeenth century, was immense, employing not less than 40,000 boats of large tonnage between Lahore and Tatta.

The chief trading marts on the banks of the Indus, and in the Punjaub, are Tatta, Haïderabad, the capital of Sinde, and the residence of the Ameers; Halla, Sihwan; the opulent town of Shikapoor, noted throughout India, Central and Western Asia, for the extensive banking and exchange transactions of its wealthy Hindoo bankers; Bukhur, Mitun Cote, Dhera Ghaza Khan, where the great festival of Sukhee Surwur and fair of five days is held annually near the gorge of the Taht-i Suleiman mountains; Dhera Ismael Khan, Kalabagh, Attock, Loodiana, Umritsir, Mooltan, Bhawalpore, Lahore, &c. The banks of the Chenab and the Ravee abound in coal mines. From the above named entrepôts there is an extensive commercial intercourse by caravans of camels, with the various countries of Central, Western, and Northern Asia, to the west—and also with the great trading marts of Kashgar, and Yarkand with 200,000 inhabitants, in Chinese Turkestan; Lhà sà, or "land of gods," and other chief towns in Tibet, to the east—of the Hindú-Kush, and north of the Himalaya; all which produce many articles of great commercial value, and take in exchange a great variety of the products and manufactures of China, India, and the western nations. Tibet possesses the precious metals in great abundance. The first rate Chinese sycee—the native silver of the country—contains some parts of gold, and is said to surpass in fineness and purity that of any other country in the world.

Captain Conolly, in his "Journey to the North of India," in 1830, states that English goods generally sold in Bokhara at the rate of 150 to

200 per cent. profit upon prime cost at Bombay; and that the net profit of the Lohani Afghan merchants gained upon the sale of British goods at Candahar and Herat, was 100 per cent. upon prime cost in British India. Mohun Lal, the Cashmerian, states, in his travels in Afghanistan, that at Candahar and Herat a particular description of cotton, woollen, and silk goods, subject to a duty of only 10 per cent., readily sell from twice to four times their prime cost at Bombay. White cotton goods find a ready sale in Cashmere, in return for shawls and various kinds of Cashmerian fabrics. The coarse though more durable cotton goods of the Russian, are greatly preferred throughout Central Asia to those of English manufacture, which of late years have been too much fabricated for the cheap sale of a showy but slight article.

Sinde and the Punjaub are as quiet and peaceful as any of the provinces of British India, and, by the latest accounts, more prosperous than most of them. Very large appropriations have recently been made by the native governments for the construction of roads, to facilitate commercial intercourse throughout their own territories, and with the adjoining countries. Associations have been formed by the native chiefs for the purpose of improving the agriculture of the country; and native workmen have been sent to Bombay to become proficient in various branches of industry, and learn how to construct implements that may be of advantage to them at home.

Nearly all the Malwa opium is shipped at Kurrachee. It is stated, on good authority, that the production of the drug in that district, in 1847, amounted to 30,000 chests. The product of the other side of India is estimated at about the same quantity. These 60,000 chests find their way almost exclusively to the markets of China, where they are sold and bought, nominally, as a contraband article, at $600 per chest, more or less, = $36,000,000.

Besides the route of the Indus there is an extensive commercial intercourse, by caravans, with Candahar, Herat, and the chief trading marts of Central Asia, through the richest and most populous portion of Beloochistan, from the Belooch port of Sonmeanne, in the province of Lus, west of Kurrachee. There is also another route through Persia, from the port of Bushire, or Abushire, "the father of cities," in the Persian gulf. Ispahan is the principal emporium of Persia, and on the great line of communication between Afghanistan, India, Chinese Turkestan, Tibet, and China, on the east; and Turkey, Egypt, and the Mediterranean, on the west. A considerable number of its chief merchants have capitals embarked in trade, which vary from $400,000 to $800,000 each; and not only control, in a great degree, the whole trade of Persia, but are able also, it is said, to influence prices in the markets of Western and Central Asia.

Russia imports, overland, raw cotton from Persia, Khaurism, Bokhara, and Kokan, and other countries of Central Asia. It is short staple, and only fit for spinning by hand, or to be converted into wadding. The importation of cotton, wool, and yarn, from those and other countries, into Russia, is progressively increasing; the latter is principally employed in weaving cloth of an ordinary texture, and for making candle-wick. The cotton cloth called *Persians*, formerly extensively manufactured in Shiraz and Ispahan, and now successfully imitated in England, Germany, and Russia, forms the largest amount of the imports from those countries into

Persia. The demand for cotton prints, and American cotton goods, is said to be rapidly increasing in all the countries of the East.

Tibet is accessible on the east by the route of the great river Brahmaputra, or "son of Brahma;" the Dzangbo, its principal upper affluent, having its sources near those of the Indus, but flowing in an opposite direction, passing near Tshoo Lomboo, and within about 30 miles of Lhasa. After leaving the mountain ranges of the Himalaya, it runs through the valley of Assam 500 miles in a southwest direction, where it receives 34 rivers descending from the north, and 24 from the south mountains of that province, all of which are navigable from the sea for steamers and trading vessels of some size, as far as Sonpura, 12 miles above Sudya, and 600 miles from the sea, or about the 96th meridian. The Brahmaputra falls into the bay of Bengal, near the mouth of the Ganges, and its entire length, including the Dzangbo, is about 1,500 miles.

The *ficus elasticus*, or India-rubber tree, abounds in all the forests of Assam, and frequently attains the height of 100 feet. The juice is procured by the natives from transverse incisions made in the larger roots of the tree, which are for the most part half exposed. The flow of the juice takes place principally from the bark; half a maund, or 41 pounds, may be considered a fair average of each bleeding. This province alone, it is calculated, will be able to meet all demands for that highly useful article. The tea tree is indigenous to the soil, and is successfully cultivated on the plantations belonging to the "Assam Tea Company" of London, and the company have established a line of steamers between Calcutta and Sudya. Several of their shipments of Assam tea have averaged 2*s*. 6*d*. sterling per pound in London.

Cotton is not grown in the province, but cotton goods are extensively imported from Bengal. The trees producing lac are also of great importance to the province. Still more important are several species of *Tetranthera*, on which is fed the Assam silk-worm, producing the silk known in common as *mazan kuri* and *moonga*. Three-fourths of the upper classes of the Assamese are clothed in silks of domestic manufacture. A sample of a new rice denominated *bocca dhanya*, the produce of a certain part of the province, has lately been sent from Gowhatty to Calcutta. The chief quality of this rice is, that if it is kept for twenty minutes either in cold water or milk, it is sufficiently cooked, and becomes eatable.

At a late meeting of the Royal Asiatic Society of London, a specimen was presented of the inner bark of a tree indigenous in Assam, called *odassi* by the natives, strips of which are made into rope for the capture of wild elephants. The fibre is very strong, especially when wet, and the donor of the sample is of the opinion that it might be advantageously introduced into the manufactories of England.

Among the Abors, or "Independent" tribe of this province, every village forms a democratical republic by itself, and is governed by laws enacted by all the inhabitants in a formal meeting. This meeting is called *Raj*, which evidently signifies the "sovereignty," or "republic." It is held in the morning, and every male inhabitant has an equal vote. Some few, either by their superior wealth, hereditary reputation, or real ability, exert a very strong influence over the rest, and can readily sway them to any measure they like. The *Raj*, however, is extremely jealous, and very vigilant in pursuing their democratical rights. Hence they

have laws which make the public burdens fall equally on all. In the middle of the village is the *morang*, a large building, which serves as a hall of audience and debate, as a place for reception of strangers, and as a dwelling for the bachelors of the village generally, who by their laws are not entitled to the aid of the community for the construction of a separate house. Their orators seem to have studied rhetoric, and to have considered its effects upon the minds of their countrymen; they speak in a remarkably emphatic style, dwelling upon each word and syllable. They are wonderfully fond of holding their political meetings, at which they are heard with the utmost patience, and without any interruption; and in this particular they are certainly much superior to many civilized nations. If, in an affair of importance, the assistance of their neighbors is required, they send an ambassador to the other republics, who are charged to make proposals, or to accept what has been proposed by another community.

The other principal native Assamese tribes are the Singphos, Booteas, Ratteras, Duplas, Nishmis, Miris, Khasias, Doms. Kacharis, Gelongs, and Nagas. Various dialects are spoken, but the Assamese is the principal language. Portions of the Holy Scripture, and also numerous tracts and elementary works, have been translated into it by the Rev. N. Brown, A. M., and his colleagues, of the American Baptist mission to Assam. One of the number, the Rev. O. T. Carter, of the Sibsigar station, commenced in January, 1846, a monthly periodical of a religious and miscellaneous character, in the Assamese, called the Orunodoi, or "Rising Dawn."

8. Policy of encouraging immigration of Chinese agricultural laborers to California.—Railroad from the Mississippi to the bay of San Francisco.

With the view of bringing the fertile lands in California under early cultivation, I would suggest the policy of encouraging immigration of agricultural laborers from China to that territory. No people in all the East are so well adapted for clearing wild lands and raising every species of agricultural product, especially rice, cotton, tobacco, sugar, and silk, as the Chinese. They are the principal cultivators, agricultural laborers, mechanics, and ship-carpenters, throughout the various islands of the Indian Archipelago, Java, Borneo, Penang, Singapore, Malacca, Siam, Cochin China, the Philippine islands, &c., where they are estimated to exceed 2,000,000, nearly one-fourth of whom are established in Siam: the culture of sugar, the principal export of that country, is almost exclusively in their hands. A large amount of the traffic, and a greater proportion of the carrying trade of those countries, is conducted by them. The better class of the settlers are described as enterprising, keen, laborious, and persevering; and those in traffic, expert, speculative, and judicious.

The establishment of a colony of Chinese cultivators at some eligible location on the coast of California, would, as a natural consequence, attract thither their trading junks, and lead to the opening of a direct commercial intercourse from thence with China, and all the eastern countries with which the Chinese carry on their junk trade. The superabundance of the population of that immense empire, annually compels vast numbers to emigrate. A channel for emigration once opened, great multitudes from that over-peopled country would wend their way to California.

Some of their junks are of 1,500 to 2,000 tons burden, and frequently arrive at Singapore, and other places in the Indian Archipelago, with 1,200 emigrants on board, seeking employment. The junks are divided into seven or more different compartments, water-tight, usually belonging to different persons on board for the voyage. They are now beginning to build fast-sailing ships after our models. The greater proportion of emigrants are from Amoy, in the province of Fokien.

Emigration, instead of being prohibited as formerly, under severe penalties, is now encouraged by the Mandarins. A considerable number of Chinese coolies have been engaged to work for a term of years, at low wages, on the coffee and sugar plantations of the French island of Bourbon. Arrangements are in progress, under the sanction of the colonial authorities of Australia, to introduce the culture of sugar, cotton, and rice, on an extensive scale, in tropical Australia, and to supply the planters with predial laborers from China. Several ship loads of natives of the New Hebrides and Solomon's group have likewise been imported into the same colony, to serve as shepherds and agricultural laborers.

The commodious port of *San Francisco* is destined to become the great emporium of our commerce on the Pacific; and so soon as it is connected by a railroad with the Atlantic States, will become the most eligible point of departure for steamers to Oregon, China, the Indian Archipelago, &c. Coal of an intermediate species between bituminous and anthracite, burning more easily than the latter, but a little harder, and giving out less smoke than the former, has been recently found in large strata in its vicinity.

It is stated, on reliable authority, that the country along the valley of San Joaquin, between the bay of San Francisco and the Mississippi, is comparatively level, presenting less difficulties in execution, and more advantages in a commercial point of view, than any other projected route for a railroad between the Atlantic and Pacific, within the territorial limits and occupancy of the United States.

By this route it is proposed "that the railroad should start from the Mississippi, near the mouth of the Ohio, or at such a point that the navigation will never be interrupted by ice; thence to the vicinity of Arkansas; thence along the prairie ridge, which separates the waters which flow into Arkansas from those which flow into the Mississippi and Missouri, to the point where the road passes from Missouri to New Mexico, and by San Miguel, to Santa Fe; thence up the valley to Rio del Norte, to the mouth of Abeca creek; thence through a pine forest of low sandy hills, ninety miles, to the Rio de la Plata, which is a tributary of the San Juan, and this is a tributary of the Colorado. It should cross the last named river to the northwest side, and proceed along the trail from Santa Fe to California to a point between the Mahawee river and the San Bernadine mountains; thence through about ten miles of low hills to the great valley of the San Joaquin; thence down that fertile valley about five hundred miles on a level, to the tide-water of the bay of San Francisco. By this route the road will pass over a dead level of about eight hundred miles at the eastern, and about five hundred miles at the western end; will have no mountains to cross; will be really free from snow in all parts; and will afford an outlet from New Mexico to both oceans, to terminate at the best port on the western coast of America."

9. Ship canal from the Atlantic to the Pacific.

The five points indicated by the illustrious Humboldt, by which an artificial communication may be opened between the two oceans, are the following:

1. The isthmus of Tehuantepec, between the sources of the Rio Chimalapa, which has its outlet in the Pacific, and the Rio del Passo, which falls into the Huasacualco, and the latter which empties into the Atlantic.
2. The isthmus of Nicaragua, between the lake of Nicaragua, forming the source of the river San Juan, which has its embouchure in the Atlantic, and the gulfs of Nicoya and Papagayo, or port of Realejo, on the Pacific.
3. The isthmus of Panama.
4. The isthmus of Darien, or Cupica.
5. The isthmus between the Rio Atrato, which falls into the Atlantic, and the Rio Chocó, which falls into the Pacific.

With respect to the first of the above routes, which is about one hundred and twenty miles across in a straight line, the sand-banks and quicksands at or near the mouth of the Chimalapa, and moveable sand-bars of San Francisco, on the Pacific; the want of a good harbor at the embouchure of the Huasacualco on the Atlantic; the number of rapids on both rivers, and the intermediate elevations to be surmounted, would appear to render impracticable a ship canal at this point. M. Deflot de Mofras, late member of the French legation in Mexico, carefully explored this route by order of the French government in 1842, and made a topographical map of the isthmus, which is appended to the report of his surveys. After specifying in his report the various difficulties of the route, he states emphatically, "of all the communications between the Atlantic ocean and the South sea, that of the isthmus of Tehuantepec appears to us the last that should be adopted."

From the various surveys that have been made of the third, fourth, and fifth routes above indicated, it appears that neither of them is practicable for a ship canal, and would require the construction of intermediate railroads to complete the communication between both oceans.

M. De Mofras concurs with Humboldt in opinion that the second of the above routes, viz: lake Nicaragua and river San Juan, is the only practicable oceanic ship canal between the Atlantic and Pacific, and has incontestable advantages over all the others; though not the shortest, it is considered the best, on account of the good harbors which exist at each end, and the great natural advantages afforded by the river and the lake, and the favorable nature of the country through which the canal would have to be cut. Levels taken by eminent Spanish engineers, show that the lake is about 128 feet 3 inches above the level of the Pacific at low tide. The tide rises 12 feet on the coast at the port of San Juan of the South; and there is no essential difference between the levels of the two oceans.

The lake of Nicaragua is about 90 geographical miles long, by 40 wide in the widest part, with an average breadth of 20 miles, and is from 2 to 15 fathoms deep. A number of islands are scattered over its surface, the principal of which are Omotepa, Madera, Zapatera, Sanate, Salentinane, and Zapote. The first is the largest, and is inhabited by natives who have two settlements on it called Moyogalpa and San Jorge. All the islands are well adapted for cultivation, and are covered with a variety of fine tim-

ber. The Rio Frio and several large rivulets empty into the lake. It is about 20 miles distant from lake Leon, or Managua, which is 35 miles in length by 16 in breadth, and united to the former by the river Tipitapa, navigable for small vessels to Pasquiel, within a mile of the rapids of that river, which have a fall of 13 feet. The lake is 28 feet 8 inches higher than the Nicaragua, about the same depth, and is fed by a number of small streams. It is about 29 miles from the port of Realejo, on the Pacific.

The western coast of the lake of Leon is twenty-six feet above the level of the lake. From hence the land rises gradually for a distance of 2,725 yards to an elevation of fifty-five feet six inches; here is then the culminating point, whence the ground gently descends to the ocean.

At a distance of eleven miles from the western shore of the lake, on the line which the canal should take to join Realejo, we find the river Tosta, which, at this spot, is thirty-four feet above the lake; and of course its source, issuing at the foot of the volcano Telica, must be much more elevated. This river would supply the canal with abundance of water, being, on an average, sixty-five feet wide, and six feet deep at low water. The rapidity of its current, which appears to be considerable, has not been estimated.

Captain Sir Edward Belcher, R. N., who explored this country in 1838, states:

"We pitched our observatory near the sea-margin, at the base of the volcano of Conseguina, or Quisiguina, and having completed the requisite observations, started with the *Starling* and boats to explore the Estero Real, which I had been given to understand was navigable for *sixty miles;* in which case, from what I had seen of its course on my visit to the Viejo, it must nearly communicate with the lake of Managua.

"After considerable labor, we succeeded in carrying the *Starling* thirty miles from its mouth, and could easily have gone further, had the wind permitted, but the prevailing strong winds rendered the toil of towing too heavy.

"We ascended a small hill about a mile below our extreme position, from which angles were taken to all the commanding peaks. From that survey, added to what I remarked from the summit of the Viejo, I am satisfied that the stream could have been followed many miles higher; and I have not the slightest doubt that it is fed very near the lake of Managua. I saw the mountains beyond the lake on its eastern side, and no land higher than the intervening trees occurred. This, therefore, would be the most advantageous line for a canal, which, by *entire lake navigation*, might be connected with the interior of the States of San Salvador, Honduras, Nicaragua, and extended to the Atlantic. Thirty navigable miles for vessels drawing ten feet, we can vouch for, and the natives and residents assert sixty more. But steamers will be absolutely necessary to tow against the prevalent breezes."

The river San Juan is the common outlet of both lakes, and is about 104 miles long, having its embouchure in the Port of *San Juan of the North*, on the Atlantic, in 10° 56′ 45″ north latitude, and 83° 43′ 14″ west longitude. It varies in width from 100 to 400 yards; has a gentle current of 1 to 1½ mile per hour, with a depth of 2½ to 9 fathoms at low water; the average depth of the channel is 3 to 5 fathoms, but it is subject to a considerable rise and rapid current during the rainy season, from May to November. It receives the waters of the rivers San Carlos, Sarapiqui, and

numerous large creeks, and is navigable at all seasons for vessels drawing 3½ to 4 feet water. The principal, and in fact the only difficulty now experienced in navigating the river, is owing to four obstructions, consisting of ledges of rocks and large stones in its bed, called Machucha, Balas, Castillo, Viejo, and Toro, all within a space of ten miles, and between which the channel is 3 to 6 fathoms deep. The largest of these obstructions, that of Machucha, does not exceed a mile in extent.

The port of San Juan de Nicaragua, or Del Norte, according to the accounts given by Messrs. Baily, Rouhaud, Dumartray, and several other French officers, is extremely large and safe.

By inspecting the plan drawn on the annexed map, in 1832, by Mr. G. Peacock, of H. M. ship *Hyacinth*, it will be found that the bar is capable of admitting large ships, and that the roadstead affords a good shelter from the northerly winds which prevail with great violence in those roads.

The Colorado diverges from the San Juan in 10° 50′ north latitude, and after running in a southwesterly direction, falls into the sea in 10° 46′, forming a dangerous bar. This river abstracts from the main stream a considerable quantity of water, the opening from the San Juan being twelve hundred feet wide, and having in the deepest part nine feet of water at the lowest state of the river. From measurements of this section, carefully taken at two different periods, in May when at the minimum, and in July when much increased by freshes, it appears from calculation, that at the first period the loss of water from the river was 28,178 cubic yards per minute, and at the latter observation as much as 85,840 cubic yards. The main current being thus suddenly weakened, the motion of the water becomes sluggish, and the natural effect is, that deposites of sand and mud are formed, which gradually augment where the movement of the water is feeble; trunks of trees and other floating bodies grounding on these, small islets are formed by successive aggregations, which soon become covered with rank grass, reeds, and other herbaceous plants of rapid growth; a great number of these mounds have been thus raised, and the progress of formation is continually going on. The usual methods of clearing the beds of rivers could here be applied with facility and good effect, as the accumulations are nothing more than silt and sand, with occasional logs buried underneath. A dam across the Colorado branch, constructed on such of the well known plans as might be judged the most efficient, would be indispensable. Then the reforced body of water, aided, if necessary, by the resources of art, would, by the momentum of its increased velocity, soon clear a channel to the depth that should be deemed requisite: other parts of the river where such operations might be wanted, could be improved by nearly similar methods, as the bottom is everywhere composed of mud and sand, except about the rapids, where it is of rock or loose stones.

The port of *San Juan of the South*, on the gulf of Papagayo, in the Pacific, is in 11° 15′ 57″ north latitude, and 85° 52′ 56″ west longitude. It is small, but sufficiently commodious, surrounded by high land, except on the south-southwest, where it is open to the sea. The depth of water is from 3 to 6, 7, 8, and 9 fathoms, at the distance of 300 yards from the shore. The entrance is about 1,100 yards wide; the anchorage tolerably good, with a muddy bottom. The pervailing winds on this part of the coast are from the north and northeast, which sometimes blow with great violence, and make it difficult for vessels to enter the port. Fresh water

may be had at a short distance from the beach; fish is abundant, but nothing else but fire-wood is to be had. The country is uninhabited, and there is no settlement nearer than the town of Nicaragua, 7 to 8 leagues distant.

The country is well suited to agriculture, and capable of almost every species of improvement; the climate is good and salubrious; the temperature moderate, as the heat seldom exceeds 84° to 86° Fahrenheit.

From this port to the embouchure of the river Lajas, on the western shore of lake Nicaragua, in 11° 24′ 7″ north latitude, and 85° 46′ 39″ west longitude, by a route following the lowlands, valleys, and ravines in the dividing ridge, is 28,408 yards—in a direct line, 20,401 yards; and the highest intervening peak 615 feet above the Pacific, according to the surveys made by Mr. Bailey, an English engineer, in 1837 and 1838.

The river Lajas varies from 25 to 100 yards in breadth, with depth of water from 1 to 3 fathoms; the bottom is of mud to a further depth of several feet, beneath which there is in some places rock or stone: this has been ascertained by repeated borings. The bank on one side is thickly wooded for a distance inland of about 300 to 400 yards: on the opposite side there is a dense growth of wild cane of great extent.

The port of *Realejo*, also situated in the State of Nicaragua, is in 12° 28′ north latitude, and 87° 12′ west longitude. It is a good and safe harbor, and there is sufficient depth of water for vessels to come within half a mile of the city. In the time of the Spanish government several large ships were built at this port, which has better and more durable timber, and affords greater facilities for ship building than Guayaquil, or any other port to the south, on the Pacific.

Captain Belcher also surveyed the harbor of Realejo, in 1838, as given in the annexed map of Nicaragua; he states that "it has two entrances, both of which are safe, under proper precaution, in all weather. The depth varies from two to seven fathoms, and good and safe anchorage extends for several miles; the rise and fall of tide is eleven feet, full and change three hours six minutes. Docks or slips therefore may easily be constructed, and timber is readily to be procured of any dimensions; wood, water, and immediate necessaries and luxuries, are plentiful and cheap. The village of Realejo is about nine miles from the sea, and its population is about one thousand souls. The principal occupation of the working males is on the water, loading and unloading vessels. It has a custom-house and officers under a collector, comptroller, and captain of the port."

RECAPITULATION.

The proposed canal between the Atlantic and the Pacific oceans, commencing at the port of San Juan, and terminating at the port of Realejo, would traverse, 1st, the river San Juan, which, according to Mr. Bailey, is, with its windings, ninety English miles, and one hundred and four miles according to the narrative journal of Mr. G. Lawrance, mate and assistant-surveyor of Her Majesty's surveying vessel *Thunder*, in March, 1840; 2d, the lake of Nicaragua, which is ninety geographical miles long; 3d, the river of Tipitapa, joining the lake of Nicaragua to that of Leon, a course of twenty miles; 4th, the lake of Leon or Managua, which is thirty-five miles; 5th, the isthmus between the lake of Leon and the port of Realejo, twenty-nine miles.

Length of the river San Juan - - - -	104	miles.
" " lake of Nicaragua - - -	90	"
" " river Tapitapa - - - -	20	"
" " lake Leon - - - -	35	"
" " isthmus between the lake Leon and the Pacific ocean - - - -	29	"
Total length of the communication between the two seas	278	"

Of which only about eighty-two miles would require to be worked.

The government of the "Republic of Central America" having, in 1825, through Señor Cañas, its minister plenipotentiary to the United States, invited proposals for the construction of a ship canal by this route, I was induced to send out a special agent to Guatemala on the business in the fall of that year. The person I employed on that agency was the late Colonel Charles de Beneski, a Polish officer of great intelligence and indomitable energy of character, who had served as military secretary and aid-de-camp to Iturbide, when emperor of Mexico. He met with great opposition from "The British Atlantic and Pacific Canal Company," which was then before the British Parliament for a charter, with a capital of one million sterling; and it was understood had offered their agent in Guatemala a bonus of £30,000, in the event of his obtaining from the federal government of Central America an exclusive grant to the company for the construction of the canal.

Notwithstanding the intrigues and machinations of his opponents, Col. de Beneski succeeded on the 14th of June, 1826, in concluding a contract, as my duly authorized agent *ad hoc*, with Francisco Gomez de Arguello, Secretary of State and of the Treasury of the supreme government of the federal republic of Central America, acting in pursuance of a decretal order of the Congress of that republic, of the 20th May preceding, granting me and my associates the exclusive privilege of making the canal, and enjoying the sole profits thereof, under certain restrictions. The contract is sealed with the great seal of the republic, and is executed with all the authenticity of a public treaty. It is also duly attested under the seal of the legation of the United States, by Colonel John Williams, then resident American minister at Guatemala, who was present at the execution thereof.

With the view of giving an early inception to so magnificent an enterprise, under the most favorable auspices, on the 5th October of the same year I executed a deed of trust to my illustrious and lamented friend De Witt Clinton, then governor of the State of New York, investing him with plenary powers to organize a company with a capital of $5,000,000, the estimated cost of the work, to carry it into execution. Arrangements were made with our government to send out the late General Bernard and Captain Poussin, his aid, then topographical engineers in the service of the United States, to make careful surveys of the proposed route, and estimates of the cost of the canal. In the month of November following I went over to England, with the object of interesting British capitalists in the undertaking; but owing to political disturbances in Guatemala, which resulted in the dissolution of the republic of Central America, a general revulsion in commercial credit, and other untoward events at the

time, my mission to England proved abortive; the company which had been provisionally organized by Governor Clinton never went into operation, and I sustained a very heavy pecuniary loss by the transaction.

The following copy of a letter from Governor Clinton to the gentlemen appointed his associate trustees, will show the high importance he attached to the enterprise, and the spirit in which it was intended to be carried into operation by himself and co-trustees. The execution of the deed of trust, on his part, was witnessed by the Hon. William L. Marcy, then comptroller of the State of New York, and was duly attested under the great seal of the State.

[PRIVATE.] ALBANY, *October* 6, 1826.

GENTLEMEN: Considering the importance of the grant made by the Central government of America to Mr. Palmer, its binding nature and authentic character, (having been attested by Colonel Williams, our minister,) I have considered it my duty to enter into the arrangements which will be shown to you, confidently hoping that you will associate your labors with mine in this great undertaking, and fully believing that no injurious responsibility can accrue, and that great good may be done. Early measures will be taken to procure an act of incorporation from our legislature, and the whole character of the transaction will be free from the taint of speculation.

I am sincerely yours,
DE WITT CLINTON.

S. VAN RENSSELAER,
C. D. COBDEN,
P. HONE, and
L. CATLIN, Esqs.

From the best information I have been enabled to obtain on the subject, the difficulties to be surmounted in the construction of an oceanic canal by the above indicated route would appear to be rather political than physical, on account of the unsettled state of public affairs in Central America for many years past, without any stable government to negotiate with for the cession of the required portion of territory through which it is proposed to open the canal. It ought to be a national work, not a privileged monopoly, conferred on any private association or corporate body; open to the transit of vessels, merchandise, and passengers of all nations, upon the same footing, subject to fixed and uniform rates of toll; and, under the management of a local board of commissioners, not amenable to the jurisdiction or control either of the government or public authorities, State or Federal, of that republic, except in cases to be specially provided for.

Entertaining these views in regard to this magnificent project, I would respectfully recommend that negotiations be opened as early as practicable by our government with the actual government of "the States of Central America," for the purpose of obtaining permission to explore and survey the proposed route for a ship canal from one ocean to the other; and also to ascertain the terms and conditions on which that government would agree to surrender its title and jurisdiction to the required portion of territory through which the canal may be opened in the State of Nicaragua, and that competent engineers be employed by our government, so soon as

such permission is obtained, to explore and survey the isthmus at different points, and ascertain the most feasible route for a ship canal, in order to enable it to adopt such ulterior measures as may be deemed expedient and requisite to carry the enterprise into execution: and also that negotiations be opened by our government with such European governments as would probably be disposed to co-operate in promoting the object, especially those of Great Britain, France, Holland, Belgium, Russia, Sweden, and Denmark, for the purpose of entering into arrangements to accomplish the great end in view, through common means and united exertions.

In 1842 the British authorities of the Balise took under their guardianship an Indian boy, chief of the Mosquito tribe of Indians, occupying the Mosquito shore of the bay of Honduras, and claimed in his favor not only the right of sovereignty of that territory from the cape of Honduras, but also the adjacent coast of Nicaragua to the mouth of the river San Juan of the North. The British consul, Mr. Walker, resident at Blewfields, is the guardian of the boy, who is dignified with the title of "King of Mosquitia," and is about 15 years of age. The consul governs in the King's name, and the minor is educated under his inspection, by English teachers, who give him daily lessons. It is understood at Blewfields by the most intelligent persons that the port of San Juan will soon be occupied by British forces, in the name of the King of Mosquitia.

Señor Sebastian Salinas, Minister of Foreign Relations of the government of Nicaragua, has addressed an official communication to Mr. Chatfield, consul general of her Britanic Majesty to the States of Central America, in which, after remonstrating energetically against the assumed sovereignty of the pretended King of Mosquitia over any portion of the territory of Nicaragua, he concludes by declaring that Nicaragua will consider as an act of war any attempt on the part of the Mosquito Indians, and their confederate the British, to take possession of the port of San Juan; that she will resist all these encroachments to the death, and will appeal to the other Christian and impartial nations of the earth to aid and assist her against this unlawful usurpation and invasion of her territory.

PROSPECTUS.

THE

UNKNOWN COUNTRIES OF THE EAST;

THEIR

PRESENT STATE, PRODUCTIONS, AND CAPABILITIES FOR COMMERCE;

INCLUDING

A COMPREHENSIVE DIGEST OF THE PRODUCTIVE RESOURCES, TRADE, COMMERCE, TARIFFS, DUTIES, COMMERCIAL REGULATIONS, MONEYS, WEIGHTS AND MEASURES, EXPORTS AND IMPORTS, OF THE PRINCIPAL COUNTRIES OF EASTERN AFRICA AND ASIA;

AMERICAN TREATIES WITH CHINA, SIAM, MUSCAT, AND SOOLOO; AMERICAN CONSULS AND MISSIONARIES IN THE EAST;

TOGETHER WITH BRIEF NOTICES OF

THE CUSTOMS, RELIGIONS, LANGUAGES, &C., OF VARIOUS ORIENTAL NATIONS.

Collected from the latest accessible authorities—Asiatic, Oriental, European, and American—and intended as a guide for American commerce and intercourse with the East.

BY AARON H. PALMER,

Counsellor of the Supreme Court of the United States, Corresponding Member of the National Institute, Washington, and of the Royal Economical Society of the Philippines, Manilla, &c. &c.

WILEY & PUTNAM—NEW YORK AND LONDON.

Testimonial of the Hon. Robert J. Walker, *Secretary of the Treasury, in favor of the work.*

New York, *August* 11, 1847.

Sir: I have read the synopsis of the book you are about publishing, entitled "The Unknown Countries of the East," as also considerable portions of the work itself. Independent of the value of the work as a literary production, it is eminently calculated to enlarge our commerce.

As soon as it is published, I will supply the several bureaus of the Treasury Department with copies, as also the principal custom-houses.

For myself, individually, as a small evidence of my appreciation of your great and valuable labors, I will take five copies, and regret that my limited means do not allow me to subscribe for a larger number.

Most respectfully, your obedient servant,

R. J. WALKER.

Aaron H. Palmer, Esq.

SYNOPSIS OF THE COUNTRIES DESCRIBED IN THE WORK.

ISLAND OF ASCENSION. ISLAND OF ST. HELENA. COLONY OF THE CAPE OF GOOD HOPE. *Cape Town, Simon's Town, Port Elizabeth, Port Natal.*

EAST COAST OF AFRICA, from *Port Natal* to the Island of *Socotra*, viz: *Delagoa bay, Inhambane bay, Sofala, the Cuama or Zambesi river, Quilimane, Great Lake N'Yassi, &c.*, in the interior, *Island of Mozambique, Querimba, Macaloe bay, Mongallou river, Lindy river.*

ZANGUEBAR. *Quiloa, Zanzibar, Latham's island,* covered with guano. *Mombas, Melinda, Patte, Lamoo, River Joob, Town of Joob or Soahel, Brava, Magadoxa.* ISLAND OF SOCOTRA.

Tribes of the east coast of Africa, and their languages, &c.

COMORO ISLANDS. *Comoro, Johanna.* Translation of letter from Sultan of Comoro Islands to the author, giving a list of articles suitable for that market. *Mayotta* and *Mohilla.*

ISLAND OF MADAGASCAR. *Bembatouka bay, St. Augustine's bay, Tamative, &c.*

ISLAND OF MAURITIUS. *Port Louis, &c. Seychelles,* and dependencies.

ISLE OF BOURBON. *St. Denis, &c.*

ABYSSINIA. *Ankober, Tigré, &c.* Ports of *Masuah* and *Dahlac*, on the Red Sea; *Berberah, Zeila,* and *Tajourah,* on the Gulf of Aden. Languages of Abyssinia.

THE RED SEA, OR ARABIAN GULF.

PORTS ON THE AFRICAN COAST. *Port Mornington, Suakin, Cossier, Suez,* PROJECTED CANAL from the Mediterranean to the Red Sea.

ARABIA.

THE HEDJAZ, and PILGRIMAGES TO MECCA. Ports on the Arabian coast. *Arabia Petræa.—Tor, Gulf of Akaba, Yambo, Djedda.*

YEMEN PROPER, AND THE IMAMAT OF SANA.—*Sana, Mareb* or *Saba. Himyarites, Himyaritic Inscriptions at Mareb, Arabic language, &c.*
Loheia, Hodeida, Bat-el-Fakih, Mocha.

ADEN, a dependency of Bombay. Halting station for the bi-monthly steamers between Suez, Bombay, China, &c.

SOUTHERN COAST OF ARABIA.—*Maculla, Island of Masera, Rass-el-gat, &c.*

IMAMAT OF OMAN OR MUSCAT.—*Muscat.* Town named *El-Ofir*, said to have been discovered within a few years past, on the coast of *Oman.* Treaty between the United States and the Imam of Muscat. *Bahrein Islands,* on the Arabian shore of the Persian gulf. *Bassorah,* (Asiatic Turkey,) on the Euphrates.

PERSIA.—Principal towns of Persia, and trading marts and ports on the PERSIAN GULF and CASPIAN. *Persian Language. Zend, Zendavesta.* Extracts from the translations of the inscriptions in the cuneiform or arrow-headed characters on the celebrated monument of Darius Hystaspes, at Behistun, by Major Rawlinson.

BELOUCHISTAN. Ports of *Posmee, Churbar, Gutter bay, Gwadel, Sonmeanne, &c.*

SINDE. *Haïdrabad, Shikarpoor, Dhera Ghaza Khan, &c. Kurrachee,* principal port. Steam navigation on the *Indus,* and the rivers of the *Punjaub.* Recent establishment of a commercial line of steamers between *Bombay, Kurrachee, Attock,* and the principal towns of the Punjaub.

PUNJAUB. *Lahore, Umritsir, &c.* CASHMERE. *Serinagur.* New history of Cashmere, &c.

LADAK. *Leh, Iskardo, &c.*

AFGHANISTAN. *Caubul, Candahar, Peshwar, Herat.*

KHANAT OF KOONDOOZ. *Koondooz, Khooloom, &c.*
" BOKHARA. *Bokhara, Samarkand, Balk, &c.*
" KAURISM. *Khiva, Urghem, Anbari, &c.*
" KHOKAN. *Khokan, Tashkend, Turkestan, Andejan, Khojend.* Immense caravan trade of Central Asia, with the Punjaub, Caubul, China, Russia, and Siberia.
Rivers Amu Derya or Oxus, and *Syr Derya or Jaxartes,* and *lake Aral.*

HINDOSTAN.

CUTCH. Ports of *Mandavee*, *Luckput Bunder*, *&c.*

GUJERAT. Ports of *Surat*, *Cambay*, *Baroach*, *&c.*

BOMBAY. Progress of cotton culture in India, &c. *Goa*, *Damaun*, *Diu*, (Portuguese.) LACCADIVE ISLANDS. MALDIVE ISLANDS. *Male.*

ISLAND OF CEYLON. *Colombo*, *Point de Galle*, *Trincomalee*, *&c.* Cingalese and Tamil languages.

TRANQUEBAR, ceded by Denmark to Great Britain in 1846.

PONDICHERRY, &c., (French.) MADRAS. CALCUTTA. New Bengal tariff, with the differential duties. Statement of the progress of American trade with Calcutta, &c.

ANGLO BURMAN PROVINCES.

ASSAM. *Bisnath*, *Gowhatty*, *&c.* Large forests of India-rubber trees; culture of tea, &c. ARAKAN, *Arakan*, *Akyab*, *&c.* TENNASSERIM. *Maulmain*, *Tavoy*, *Mergui*, *&c.*

BURMAH PROPER. *Ameerapoora*, *Rangoon.* Burmese language.

ANDAMAN ISLANDS.—(English.)

NICOBAR ISLANDS.—(Danish.)

SIAM. *Bankok*, *Chantibun*, *&c.* Siamese language, &c. Treaty between the United States and the king of Siam.

ANNAM, or COCHIN CHINA. *Hué*, *Turon*, *&c.* Annamese language.

INDIAN ARCHIPELAGO.

STRAITS SETTLEMENTS OF PENANG, or PRINCE OF WALES ISLAND, PROVINCE OF WELLESLEY, MALACCA, and SINGAPORE. Description of *gutta percha*, a product of the Indian Archipelago, which is becoming an important article of export to Europe and the United States.

SUMATRA. Kingdom of *Acheen*, *Quallah Battoo*, and the pepper ports, *Padang*, *Bencoolen*, *Palembang*, *&c.* BANKA. RHIO.

JAVA.—*Batavia*, *Samarang*, *Sourabaya*, *&c.* Javanese, Pali, and Malay languages, &c. BALLY. LOMBOCK. SUMBHAWA. TIMOR. TIMOR-LAUT. SERAWATTY ISLANDS. BABA. TENIMBER ISLANDS. KI ISLANDS. ARRU GROUP. *Dobbo*, the mart of a considerable traffic. PAPUA. Account of the recent exploration of the island by H. B. M. Ship Fly, &c. CERAM-LAUT. GORAM ISLANDS. BANDA, or SPICE ISLANDS. *Banda*, *Amboyna*, *Booroo*, *Ceram*, *Mysol.* GILOLO. TERNATE. TIDORE.

CELEBES. *Bonthain bay*, *Boolecomba*, *Salayer*, *Bouton*, *Gonong*, *Tello*, *Kemar*, *Manado*, *Sangir.* *Bujis of Waju*, the most enterprising and commercial nation of the Archipelago. Their language and litera-

ture; synopsis of their maritime code of laws, &c. Dutch port of MACASSAR. Proclamation of the governor general of Netherlands, India, of 9th September, 1846, declaring it a free port. Account of a voyage to Celebes, by *Rajah Brooke*, of Sarawak, Borneo.

BORNEO. *Borneo Proper. Island of Labuan, Territory of Sarawak*, and *Island of Maratabo*, British possessions. *Sambas, Pontianak, Banjarmassin, Coti, &c.*, Dutch settlements. Proclamation of the governor general of Netherlands, India, of the 28th February, 1846, defining the Dutch jurisdiction in Borneo, and appointing a Governor over the Dutch possessions of the island. Islands of *Balambangan, Banguey, and Cagayan Sooloo.*

SOOLOO GROUP. SOOLOO PROPER. *Soung.* Commercial treaty between the United States and the Sultan of Sooloo.

PHILIPPINE ISLANDS. *Manilla.* Description of the Provinces of the Philippines, and their dependencies, the MARIAN ISLANDS. Native languages of the islands. *Bashee Islands.*

NEW ROUTE OF STEAM COMMUNICATION BETWEEN ENGLAND, SINGAPORE, AND SIDNEY, through the INDIAN ARCHIPELAGO, by the way of BATAVIA, PORT ESSINGTON, and WEDNESDAY ISLAND, in TORRE'S STRAITS.

NORTH AND NORTHEAST COASTS OF AUSTRALIA.

PORT ESSINGTON. TORRE'S STRAITS. *Cape York*, recently surveyed; safe roadstead, &c.

LOOCHOO ISLANDS. *Napakiang*, *Ou Ting*, or *Port Melville ;* safe harbor, possessing great facilities for careening and repairing vessels, &c. Tributary to China and Japan.

BONIN ISLANDS. *Port Lloyd, Fitton bay, &c.*

COREA. Port of *Fung-Chang. Quelpaert's island.* Commerce with Manchuria, China, and Japan. *Corean language.*

JAPAN. *Nangasaki, Ohosaca, Miaco, Yedo, &c.* Government, laws, religions, language, literature, &c. American intercourse with the Japanese, &c.

KURILE ISLANDS, Russian and Japanese, No. 1 to No. 22, the Japanese dependency of YESO, or MATSUMAY.

YESO. *Matsumay, Chakodade, &c.* Island said to contain very rich mines of gold and silver ; possesses several fine bays and harbors. Lucrative clandestine traffic of the Russian fur traders with the Japanese Kurilians. Whales are very abundant in the vicinity of those islands.

ISLAND OF TARAKAY, or SAGHALIEN. Its ports on the gulf of Saghalien, sea of Japan, and gulf of Tartary, in the possession of the native *Aïnos* tribes, favorably situated for fishing, whaling, and trading with the neighboring islands and countries of northeastern Asia. Convention between the United States and Russia, 5th April, 1824.

CHINA.

Tabular statistical view of *China proper*. Internal trade of China, northern, central, and southern. Principal articles of export and import. Coasting trade of China. Treaty between the United States and the Chinese empire. Tariff of duties on exports and imports. Description of *Canton*, *Amoy*, *Fuchau*, *Ningpo*, *Shanghai*, *Chusan*, *&c.*

COLONIAL DEPENDENCIES OF CHINA.

MANCHURIA. *Moukden*. Ports on the gulf of Tartary, *Castrie's bay*, *Ternay bay*, *Suffren bay*, and on the gulf of Leaotong, *Kinchou*, *&c.* The great river *Amur* or *Saghalien*, and its affluents; navigation of, now tacitly permitted by the Chinese government—navigable upwards of 500 leagues from its embouchure in the gulf of Saghalien. Native tribes inhabiting its banks, &c. Manchu language, &c.

MONGOLIA. *Ourga*, *&c.* Mongolian language.

SOUNGARIA, or THIAN SHAN PELOO. *Guldsha*, *&c.*

CHINESE TURKESTAN, or THIAN SHAN NANLOO. *Yarkand*, *Kashgar*, *Kouche*, *Khouten*, *&c.*, *&c.* Oïgoorian language, &c.

TIBET. *Lhasa*, *Tshoo Lomboo*, *&c.*; Budhist religion, the predominant creed in Asia; many of its forms and ceremonies borrowed from the early Nestorians. Tibetan language and literature.

SIBERIA. *Omsk*, *Tobolsh*, *Tomsk*, *Irkoutsk*, *Yakoutsk*, *Ochotsk*. Valuable products and rich gold mines. Siberian mammoth. *Lake Baïkal*, navigated by steamers. Peninsula of KAMTSCHATKA. Chief town *Petropaulski*. Immense extent of inland navigation on the rivers of Siberia, and extensive caravan trade with China and Central Asia. Its ports of *Ochotsk* and *Ajan*, on the Gulf of Ochotsk, favorably situated for foreign commerce. Native tribes of Siberia, &c. Rapid extension of facilities for inter communication by rivers, canals, and railroads in the Russian Empire.

RUSSIAN TRADE WITH CHINA AT KIAKTA. Secret instructions of the Chinese Government to their traders at Kiakta, &c.

APPENDIX.

PROPOSED MISSION TO THE EAST, AND CONSULAR PLAN for a portion of the countries described in the work; submitted by me to Hon. James Buchanan, Secretary of State, under date of the 28th November, 1846; by whom it was transmitted to the House of Representatives, in compliance with its resolution of the 9th February, 1847, and printed with the Public Documents of the last session of Congress.

STEAM NAVIGATION ON THE PACIFIC, &c.

SHIP CANAL FROM THE ATLANTIC TO THE PACIFIC, &c.

CATALOGUE OF THE AUTHORS CONSULTED IN PREPARING THE WORK.

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In addition to the American treaties with China, Siam, Muscat, and Sooloo, the work contains the British and French treaties with China; the British treaties with the independent eastern nations, excepting those with the native princes whose dominions are within the British East India possessions, or under British protection; and I shall endeavor to procure and give abstracts of the latest European treaties with all the oriental kingdoms and states. Brief bibliographical notices of the principal oriental languages, with lists of the best grammars, dictionaries, &c., are given for the guidance of the American student.

The authorities and sources of information for a considerable portion of the work have been derived through an extensive correspondence with the East, as director of the American and Foreign Agency of this city, first commenced in 1830; since when I have regularly received many of the leading journals, prices current, &c., of China, India, the Indian Archipelago, Australasia, and the Cape Colony.

In compiling it I have had the advantage of free access to the large and valuable collections of the latest foreign publications on oriental geography, philology, commerce, voyages and travels, in the East, imported by my friends Wiley & Putnam, Bartlett & Welford, and John Doyle, booksellers of this city. Much valuable information respecting the East has also been obtained from recent missionary periodicals, European and American, Protestant and Catholic.

In order to render the work as accurate and comprehensive as possible on the various important subjects of which it treats, I am induced to solicit the aid of Congress, to enable me to visit Europe to procure the latest maps, charts, hydrographical surveys, and reports of scientific explorations in the East by the English, French, Dutch, and Russians, together with official returns of the trade, commerce, &c., of Eastern Africa and Asia. These are chiefly to be found in the India House, Admiralty, House of Lords and House of Commons, London; and in the bureaux of the respective Ministers of Commerce and Marine, at the Hague, Paris, and St. Petersburg.

A hydrographical survey of the Archipelago of the Philippine islands was completed a few years since by order of the Spanish government and sent to Madrid, a copy of which, as it has not been published, I am solicitous of procuring for the work, as also the latest official returns of the trade and commerce of those islands, which are very productive, with an aggregate population of upwards of 4,200,000. Our trade with the colony, now restricted to Manilla, is of increasing value and importance, and susceptible of greater development by the adoption of a more liberal commercial policy on the part of the Spanish government.

The English have lately completed new hydrographical surveys of the east coast of Arabia, the Persian gulf, and a portion of the China seas. They are also progressing with surveys of the Japanese seas, and the coasts of Corea and Manchuria. Baron Melvill de Carabee, an officer of the Dutch navy, has been engaged during the last twelve years in making scientific surveys of the Indian Archipelago and the Dutch East India possessions. The island of Madagascar, the east coast of Africa, and Abyssinia, have recently been surveyed by the French. The Russian surveys of the coasts of Siberia, Manchuria, the Russian and Japanese Kurile islands, and the northern Pacific ocean, are said to be the latest and best extant. These are of special importance to us at the present time in consequence of the great increase of our commerce and whale fishery in those seas, and the contemplated establishment of a line of American trans-Pacific steamers to China, to connect with the line now in progress from Panama to Oregon. Our present charts of those coasts, islands, and seas are very inaccurate. The American whale ship Lawrence was shipwrecked, as before related, upon a ledge of rocks lying within two degrees of the Kurile islands, not laid down on any chart.

Besides the above mentioned official authorities, I am desirous of consulting the transactions of the principal Asiatic, Oriental, and Geographical societies of Europe* for the late and valuable information they embody respecting the geography, hydrography, ethnography, &c., of the eastern countries described in the work—all which would enable me to make it a reliable authority for intelligent legislation and action in the future diplomatic and commercial relations of the United States with the East—greatly enhance the value and utility of the work in every branch of the public service, and also be the means of vastly extending our oriental commerce. I have reason to believe that the national comity and courtesy of the British, as well as the other foreign governments, would be extended to me in furtherance of the proposed object, were it sanctioned by the authority of Congress.

The expenses of the journey to Europe, and for procuring and engraving on steel a series of the requisite maps, charts, &c., for the work, will not probably exceed $10,000, for which a special appropriation and subscription by Congress for 2,000 to 3,000 copies of the work is respectfully solicited. Were the appropriation and subscription to be immediately made, it could be got ready for delivery by the 1st of January, 1849. The copyright to remain my property; the original maps, charts, hydrographical surveys, &c., that may be procured by me in Europe, to be deposited in the library of Congress upon the completion of the work.

All which is respectfully submitted by your excellency's most obedient servant,

AARON H. PALMER.

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* The Royal Geographical Society of Berlin reckons among its members the "Universal" Humboldt, and the eminent geographer Carl Ritter. The works of the former on the geology, orography, &c., of Central Asia, and of the latter on the physical geography of the Asiatic continent, are generally acknowledged to be the best extant.

ADDENDA TO THE MEMOIR.

ALEUTIAN ISLANDS.

The Aleutian islands derive their name from the Russian word *aleut*, which signifies a bold rock. The group is situated in the North Pacific ocean, between cape Alaska in North America, and the peninsula of Kamtschatka in Asia; describing a circular arc which extends from 163° of west to 166° of east longitude, comprehending 31° of longitude. The islands which form the two extremities of the chain, viz: Oonemak, which is separated by a narrow channel from cape Alaska, and Behring's island, which approaches nearest to the coast of Asia, are both in the 55th parallel of north latitude, while the others extend in a curve towards the south, the centre one of the chain being situated in the 53d parallel.

The number of islands composing the entire chain is very considerable; above forty have received names. The most important of those situated to the eastward—the Fox islands—are Oonemak, Oonalashka, and Oomnack. Those composing the Andrenovian division are smaller than the other, and are seldom visited. The principal of them are Amlak, Atchka, Tschetchina, Ayag, Kanaga, and Takavangha. The two last-mentioned have volcanoes, and Tschetchina possesses a high hill, which is apparently an extinct volcano. The division nearest to the Asiatic coast contains, among other islands of less importance, Semitchi, Ottoo, Agattoo, Copper island, and Behring's island.

The coasts of all the Aleutian islands are rocky, and the navigation among them dangerous. They are mostly destitute of trees, but are abundantly supplied with springs and streams of fresh water. Great quantities of drift wood from the American coast are continually thrown upon their shores. Potatoes, and several other esculent vegetables, arrive at tolerable perfection. The land animals on the islands are bears, wolves, beavers, ermines, and river-otters. The sea-otter is nearly exterminated by the hunters. Red, gray, brown, and black foxes are seen in great variety on the Fox islands; seals and whales are abundant on the coast, and sea-lions are occasionally met with. The kinds of fish most usually caught are salmon and halibut; the latter of these are sometimes of an immense size.

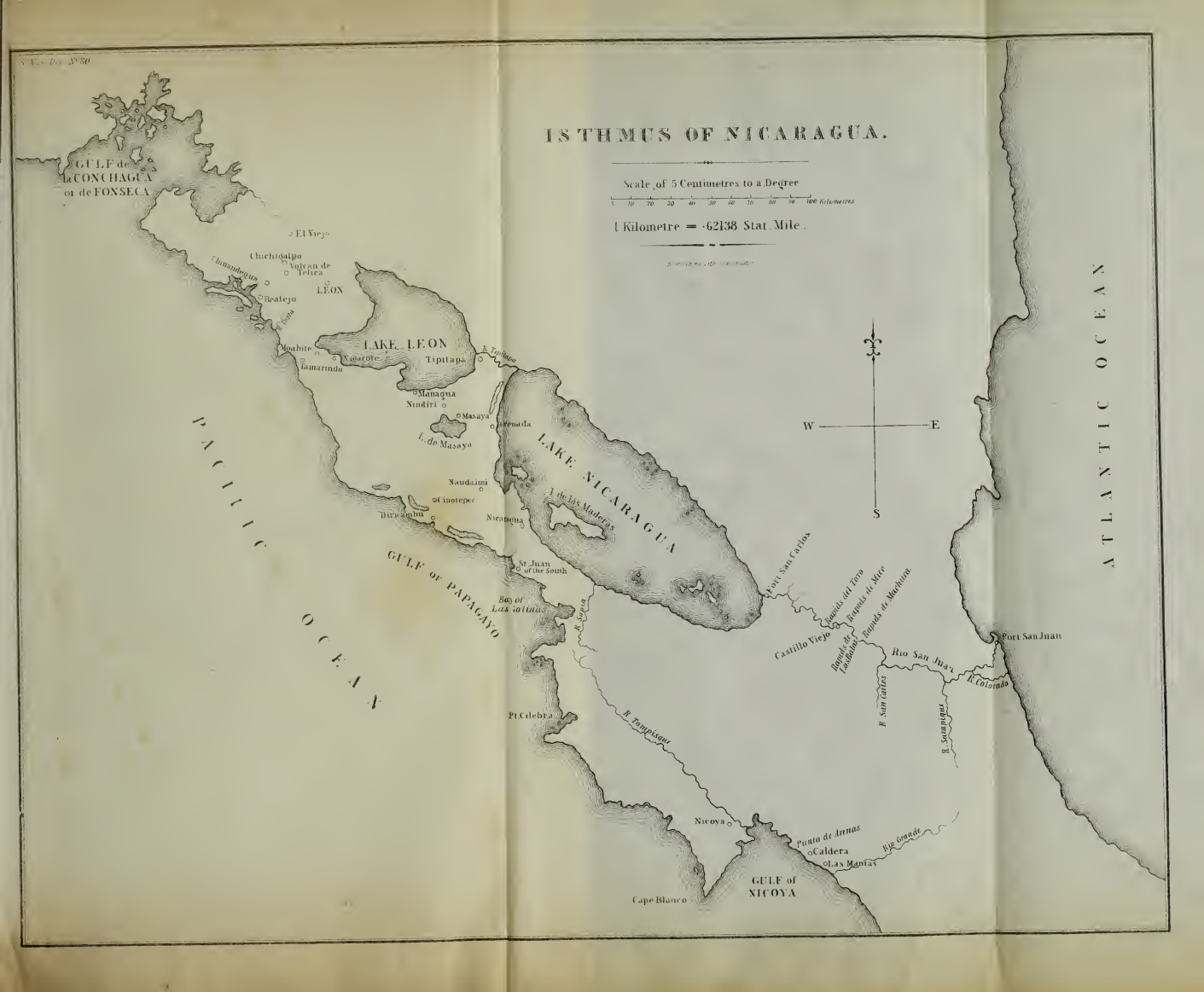
The only occupations of the islanders are fishing and hunting, and the preparation of implements necessary for those pursuits. The population has greatly diminished since the settlement among them of the Russian fur-traders. The civil and military administration of the islands is vested in the Imperial Russian-American Company, which has a factory at Oonalashka.

☞ *It was Mr. Palmer's intention to have appended to his Memoir the latest and best map of the State of Nicaragua extant, showing the proposed route of the canal, and containing surveys of the harbor of Realejo, on the Pacific, and the port of San Juan of the North, on the Atlantic, to which particular reference is made in the Memoir. The map was sent to one of the largest lithographic establishments of the city of New York, with instructions to lithograph it and deliver in Washington the required number of copies on or before the 6th instant, and he has only recently ascertained that the order could not be completed before the 1st June, and probably later.*

Under these circumstances, as there has already been an undue and vexatious delay in the printing of the document, and being very desirous of promoting the early action of the honorable Library Committee of the Senate in reference to the object of the Memoir, he has concluded to substitute the annexed map of the isthmus of Nicaragua on a reduced scale, reserving the map in question for the illustration of the chapter on the "Ship canal from the Atlantic to the Pacific," in "The Unknown Countries of the East," upon the completion of the work, according to the plan indicated in the foregoing prospectus.

WASHINGTON CITY, *May* 9, 1848.

Outline Map
of
NORTH EASTERN ASIA,
and the
ASIATIC ISLANDS of the NORTHERN PACIFIC OCEAN.
drawn from the latest accessible authorities,
by
AARON H. PALMER.
to illustrate his Memoir
GEOGRAPHICAL, POLITICAL AND COMMERCIAL,
on
Siberia, Manchuria &c.
addressed to His Excellency James K. Polk, President of the United States,
under date of the 10th Jan.y 1848. and printed by order of the Senate of the United States


ISTHMUS OF NICARAGUA.
Scale of 5 Centimetres to a Degree
1 Kilometre = ·62138 Stat. Mile.
GULF de la CONCHAGUA or de FONSECA
El Viejo
Chichigalpa
Volcan de Telica
LEON
Realejo
Chinandegan
Estero
Managua
Nindiri
Masaya
Granada
I. de Masaya
LAKE LEON
Tipitapa
Tipitapa
Tisma
Madahite
Tamarindo
Tolapote
Naudaimi
Ometepec
Diriamba
Nicaragua
I. de las Maderas
LAKE NICARAGUA
St. Juan of the South
Bay of Las salinas
Pt. Celebra
R. Tongigaqui
R. Tipitapa
GULF of PAPAGAYO
PACIFIC OCEAN
Port San Carlos
Rapids del Toro
Rapids de Mico
Rapids de Machuca
Castillo Viejo
Rapids de Tablazos
Rio San Juan
Port San Juan
R. Colorado
R. San Carlos
R. Sarapiqui
Nicoya
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